

SOUTHEAST TENNESSEE DEVELOPMENT DISTRICT

COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY (CEDS)

2012

Prepared by the



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I. INTRODUCTION

The Southeast Tennessee Development District/Chattanooga Regional Council of Governments (SETDD/CARCOG) is a special unit of local government located within the Southeast Tennessee/Northwest Georgia region. The SETDD provides planning and development services and houses the Southeast Tennessee Area Agency on Aging and Disability, the Southeast Tennessee Tourism Association, and the Workforce Investment Board. The SETDD is a vital force in helping local governments plan for the future by coordinating the establishment of regional and local priorities in its annual CEDS document.

The 1965 Public Works and Economic Development Act requires an updated or revised CEDS be submitted to the Department of Commerce's Economic Development Administration (EDA) at least once every five years in order to be eligible for public works and business loans and grants from the EDA. Coordination of the CEDS, which is the region's vision for economic development and growth, is a principal responsibility of Tennessee's Economic Development Districts. The CEDS provides information on the region's demographic and socioeconomic conditions and is developed in compliance with EDA's *Interim Final Rule*, Section 303(a).

The comprehensive planning process that goes into development of the CEDS has widespread support among local elected officials, business and industry officials, and community leaders. There is also a concerted effort to integrate existing planning programs dealing with environmental issues, transportation and land use. The CEDS is a crucial step in maintaining the SETDD's designation as an Economic Development District, and the final document, once approved, serves to enhance opportunities for the region's communities to benefit from EDA loan and grant programs.

It is essential that the region's primary economic blueprint stays up-to-date with dynamic industry trends and constantly evolving community needs. To remain current, the SETDD has submitted a revised CEDS every year since 2006. This year's CEDS features an expanded analysis of economic, social, and demographic changes. With the release of new 2010 Census results over the past year, the SETDD has been able to examine population trends in depth and more fully capture the impacts of the recent recession and ongoing economic recovery on the Northwest Georgia/Southeast Tennessee region. The new analyses reinforce the findings of previous CEDSs and highlight new concerns that *must* be addressed by this and future CEDSs.

In compliance with 13 C.F.R. § 303.6(b)(2) and § 303.6(c)(3), a draft version of this CEDS was available for review and comment by the public at least thirty (30) days prior to submission to EDA. The draft document was available on the SETDD website, and printed copies were available for pickup in the SETDD office. Those with special needs were advised to contact the SETDD office for accommodations. An advertised public hearing was held September 18, 2012, at 2:00 pm E.S.T. in the SETDD conference room located in its offices at 1000 Riverfront Parkway, Chattanooga, TN 37402.

CEDS COMMITTEE

Pursuant to 13 C.F.R. § 303.7(b)(4) and following the proud tradition of public-private partnerships that helped transform the Chattanooga area over the past twenty years, this CEDS was a collaborative effort that involved members from both the public and private sectors. The SETDD recognizes the contributions of the following individuals, organizations, companies, and interest groups who were involved in the development and revision of this year's CEDS:

Last Name	First Name	Board Representation	Company/Agency
Beckley	Bill	Private Sector	Miller Industries
Bell	Sen. Mike	Elected Official	Tennessee State Senate
Bell	Jimmy	Other	
Bott	Margaret	Career Center Partner	Adult Education
Brown	Rusty	Private Sector	Citizens State Bank
Cates	Tony	Private Sector	Gestamp Chattanooga, LLC
Childers	Ray	Private Sector	RAC and Associates
Creasy	Ric	Other	
Crutchfield	Cindi	Community-Based Org.	Alexian Brothers (Senior Aides)
Duarte	Mario	Private Sector	Volkswagen
Duke	Buddy	Private Sector	Five Star Food Services
Fults	Joe	Other	
Grant	Harley	Private Sector	Energy Solutions Group
Green	Angie	Private Sector	Cosolidated Metco, Inc.
Henry	Dean	Private Sector	Suburban Propane
Hite	Dr. Carl	Educational Services	Cleveland State
Hopkins	David	Private Sector	Angiosystems, Inc.
Johnson	Avery	Public Sector	City of Cleveland
Johnson	Richard	Public Sector	
Kirk	Susan	Career Center	TN Dept. of Human Services
Lamb	Bob	Private Sector	East Tennessee Waterfront Properties
Landrum	Connie	Economic Dev.	Volunteer Energy Cooperative
Lewis	Mary Stewart	Private Sector	AT&T
Logan	Warren	Public Sector	
Lusk	Ju-Sin	Public Sector	
Mobbs	Denny	Private Sector	Jordan Fabricating
Peppers	Yvonne	Private Sector	Airxcel, Inc. - Suburban Division
Poole	Blake	Other	TN Dept. of Economic & Community Dev.
Rose	Ryan	Private Sector	Volkswagen
Russell	Emerson	Private Sector	ERMC
Saied	Dan	Other	Hamilton County Development Dept.
Sample	Jack	Private Sector	Applied Thermal Coatings, Inc.
Seaton	Ray	Private Sector	Seaton Enterprises
Smith	Stewart	Educational Agency	Tennessee Technology Center
Smith	Vaughn	Other	
Thomas	Michael	Private Sector	Amazon Fulfillment
Tuder	Roger	Other	Associated General Contractors
White	Bob	Other	
Willett	Sara Lynne	Private Sector	Resolute Forest Products (Abitibi-Bowater)
Wilson	Tom Edd	Economic Dev.	Chattanooga Area Chamber of Commerce
Witt	Andrea	Public Sector	Career Center

The committee unanimously voted to approve the 2012 CEDS Update at its meeting on September 11, 2012.

SETDD/CARCOG SERVICE AREAS

Figure 1 illustrates the thirteen counties involved in the CEDS. Catoosa, Dade, and Walker Counties in Northwest Georgia are included in the CEDS given their contribution to the Chattanooga Metropolitan Statistical Area and regional labor-shed.

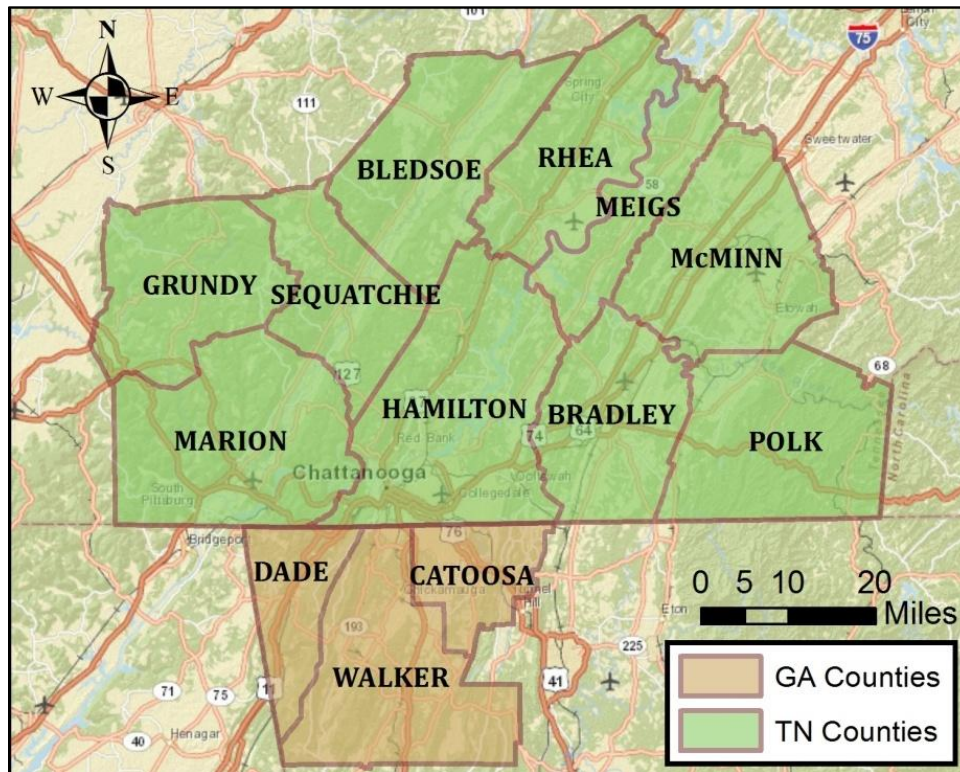


Figure 1. Map of SETDD/CARCOG Service Areas

Source: Southeast Tennessee Development District

The SETDD recognizes the contributions of the following elected officials, who represent the counties that comprise the CEDS region:

Bobby Collier, Bledsoe Co.
D. Gary Davis, Bradley Co.
Lonnie Cleek, Grundy Co.
Jim Coppinger, Hamilton Co.
John Graham, Marion Co.
Keith Greene, Catoosa Co.
Ted Rumley, Dade Co.
BeBe Heiskel, Walker Co.

John Gentry, McMinn Co.
Garland Lankford, Meigs Co.
Hoyt Firestone, Polk Co.
George Thacker, Rhea Co.
Keith Cartwright, Sequatchie Co.

CEDS INTEGRATION WITH STATE ECONOMIC DEVELOPMENT PRIORITIES

The 2012 CEDS update affirms the vision of Gov. Bill Haslam and the State of Tennessee as outlined in ECD's Regional Strategic Plan for Southeast Tennessee, and supports the larger goal of making Tennessee the #1 state in the Southeast for high-quality jobs. This CEDS also comports with the governor's Jobs4TN plan, which promotes four key strategies to strengthen the state's economy: (1) prioritize business developments in six key clusters in which the state has a competitive advantage; (2) reduce business regulation; (3) invest in innovation; and (4) establish regional "jobs base camps" in each of the state's nine regions.

In particular, the state hopes to use recent investments in the automotive manufacturing and energy sectors as a springboard for new economic growth. Private companies including Wacker, Alstom, Amazon, and Volkswagen have demonstrated their commitment to the CEDS region with billions in new investments. Current efforts to attract suppliers for these and other regional businesses are proving fruitful as well.

Public-private partnerships have been successful in developing the region's infrastructure and attracting new businesses to the region. The SETDD, ECD, and the state hope to expand and modernize the Southeast region's manufacturing base through continued public-private collaboration. In addition, industry-education partnerships that provide targeted training for careers at local businesses have proven successful at preparing the workforce for actual careers in advanced manufacturing, business, and various skilled trades in the region. The SETDD and this CEDS join the state in supporting such programs.

Expansion of industrial capacity, utility systems, and communications networks is necessary to support new businesses, both ones that specialize in manufacturing as well as those leading the way in technology-based innovation. Investment in transportation infrastructure is essential to ensure highway safety and to support the logistical operations of the region's businesses.

Another highlight of the Regional Strategic Plan is its focus on small, locally owned businesses. Chamber-driven initiatives, business development centers, and entities focusing on entrepreneurial support have the backing of both this CEDS and ECD as they lead the way in innovation and strengthen and diversify the local economy. Agricultural programs promoting local food production and consumption are also receiving the attention of the state.

Finally, this CEDS aims to provide quality-of-life enhancements that accompany the state's concentrated focus on economic development. Administering grants and supporting initiatives that provide recreational access, preserve culturally and environmentally valuable areas, fund multimodal projects, build sustainable communities, and enhance community aesthetics are not only important placemaking initiatives; they are beneficial investments in local communities and the people that have chosen Northwest Georgia and Southeast Tennessee as their home. Moreover, today's increasingly eco-conscious companies carefully consider a community's commitment to livability and long-term sustainability when selecting locations to establish their operations. What may in previous decades have been considered accessory or frivolous projects are very much at the forefront of today's economic branding and marketing initiatives.

INITIATIVES FROM OTHER GOVERNMENT-SUPPORTED PLANS

This CEDS is not meant to exist as a standalone blueprint for the region's economic future. Rather, it draws from—and contributes to—the plethora of collaborative initiatives and programs that exist and are currently in the works across the tri-state region. The following are several of the higher-profile initiatives on the CEDS region's planning horizon.

Thrive 2055

Following the advent of major new capital investments in excess of \$4 billion and the creation of thousands of new jobs throughout the region by companies including Volkswagen, Alstom, Amazon, Wacker, and IVS, regional leaders have come together to fund and launch a comprehensive long-term planning process for the tri-state region. The region consists of sixteen counties including nine southeast Tennessee counties (Bledsoe, Bradley, Hamilton, Marion, McMinn, Meigs, Polk, Rhea and Sequatchie), five northwest Georgia counties (Catoosa, Dade, Murray, Walker and Whitfield) and two northeast Alabama counties (Jackson and DeKalb). These counties share common watersheds, transportation corridors, workforces, natural resources, and cultural/heritage assets and include the Tennessee, Hiwassee and Sequatchie River watersheds, four MPOs, and three interdependent MSAs: Chattanooga, Cleveland, and Dalton.

The planning initiative has been branded Thrive 2055 and will proactively engage the people of the region in creating an action plan for making the most of our economic opportunities while preserving what we love about our home communities. Thrive 2055 will be launched in 2013. The SETDD, the Northwest Georgia Regional Commission, and the Top of Alabama Regional Council of Governments have served on the Founders Group for the planning initiative and continue to serve as a part of an advisory group to the coordinating committee. It is anticipated that the findings and recommendations of this CEDS will contribute to the Thrive 2055 initiative.

Southeast Tennessee Regional Strategic Plan

Developed as a joint venture between the Southeast Tennessee Development District and the State of Tennessee's Department of Economic and Community Development, the Southeast Tennessee Regional Strategic Plan identifies assets and opportunities in the 10-county region, defines and prioritizes targeted growth sectors, and discusses how to extend recent economic successes in Hamilton and Bradley counties for the broader benefit of the region as a whole. Together with the CEDS, the Regional Strategic Plan will contribute significantly to Thrive 2055 as well as the much-discussed statewide CEDS that may begin as soon as next year.

Regional Transportation Plan

The Chattanooga-Hamilton County Regional Planning Agency has contracted with Kimley-Horn & Associates to craft the region's 2040 Regional Transportation Plan. This plan will help prioritize transportation infrastructure projects over the next thirty years. The SETDD encourages the project team ensure the CEDS region's important economic linkages are improved and maintained. The RTP focuses primarily on Hamilton County and the direct surrounding areas; additional plans should be developed to further research and coordinate mobility projects in the tri-state region.

II. BACKGROUND: EXISTING CONDITIONS

These background elements comply with 13 C.F.R. § 303.7(1) and have been used to identify Major Findings that have been indispensable in formulating the goals, objectives, and project list for this year's CEDS update. The major difference this year is the incorporation of new 2010 Census data that has been released since the 2011 CEDS. In addition, the country is another year removed from the peak of the recent economic recession. Some elements indicating the recovery appear in the updated data; however, new surprising trends, especially in regards to poverty, income, and public assistance programs, are unexpected.

Pursuant to 13 C.F.R. § 303.7(2), this section also highlights economic problems and opportunities; current state and local workforce investment initiatives; and past, present, and future economic investments in the CEDS region.

In the charts and tables which follow, data for each county is presented along with measures for the states of Georgia and Tennessee. When appropriate, averages or subtotals for the region in each state, as well as for the entire CEDS region, have been calculated. This additional information is included to provide benchmarks that can be used to compare the CEDS region with the states of Georgia and Tennessee, and the nation as a whole. Together, this background information provides a current snapshot of the region and its economy.

POPULATION

Table 1 below shows the decennial census population counts from 1970-2010. With the exception of Grundy County in 2010, the population of every county in the region has increased over the past five decades. Hamilton and Bradley Counties, which contain the cities of Chattanooga and Cleveland respectively, are the two most populous counties in the Southeast Tennessee/Northwest Georgia region. Where practical in subsequent sections of this CEDS, Bradley and Hamilton County have been isolated from the less-populous counties in order to identify important economic and social differences between the region's urban and rural communities.

Table 1. Population of CEDS Counties: 1970-2010

	1970	1980	1990	2000	2010
GEORGIA	4,587,930	5,462,982	6,478,216	8,186,453	9,687,653
Catoosa County	28,271	36,991	42,464	53,282	63,942
Dade County	9,910	12,318	13,147	15,154	16,633
Walker County	50,691	56,470	58,340	61,053	68,756
GA SUBTOTAL	88,872	105,779	113,951	129,489	149,331
TENNESSEE	3,926,018	4,591,023	4,877,185	5,689,283	6,346,105
Bledsoe County	7,643	9,478	9,669	12,367	12,876
Bradley County	50,686	67,547	73,712	87,965	98,963
Grundy County	10,631	13,787	13,362	14,332	13,703
Hamilton County	255,077	287,643	285,536	307,896	336,463
McMinn County	35,462	41,878	42,383	49,015	52,266
Marion County	20,577	24,416	24,860	27,776	28,237
Meigs County	5,219	7,431	8,033	11,086	11,753
Polk County	11,669	13,602	13,643	16,050	16,825
Rhea County	17,202	24,235	24,344	28,400	31,809
Sequatchie County	6,331	8,605	8,863	11,370	14,112
TN SUBTOTAL	420,497	498,622	504,405	566,257	617,007
REGION TOTAL	509,369	604,401	618,356	695,746	766,338

Source: U.S. Census Bureau, 1970-2010 Decennial Censuses

In the decade from 2000 to 2010, the subregions in Georgia and Tennessee experienced population growth at a rate slower than their respective states as a whole; see *Table 2* on the next page. However, two counties—Catoosa and Sequatchie—saw their populations grow by 20 percent or more, a rate higher than either state and over twice the pace of the collective region. Grundy County was the only county to experience a population decline; its population decreased by 629 (-4.4 percent) from 2000 to 2010.

Table 2. Percent Change in County Population: 2000-2010

	2000	2010	Difference	Percent Increase
GEORGIA	8,186,453	9,687,653	1,501,200	18.3%
Catoosa County	53,282	63,942	10,660	20.0%
Dade County	15,154	16,633	1,479	9.8%
Walker County	61,053	68,756	7,703	12.6%
GA SUBTOTAL	129,489	149,331	19,842	15.3%
TENNESSEE	5,689,283	6,346,105	656,822	11.5%
Bledsoe County	12,367	12,876	509	4.1%
Bradley County	87,965	98,963	10,998	12.5%
Grundy County	14,332	13,703	(629)	-4.4%
Hamilton County	307,896	336,463	28,567	9.3%
McMinn County	49,015	52,266	3,251	6.6%
Marion County	27,776	28,237	461	1.7%
Meigs County	11,086	11,753	667	6.0%
Polk County	16,050	16,825	775	4.8%
Rhea County	28,400	31,809	3,409	12.0%
Sequatchie County	11,370	14,112	2,742	24.1%
TN SUBTOTAL	566,257	617,007	50,750	9.0%
REGION TOTAL	695,746	766,338	70,592	10.1%

Source: U.S. Census Bureau, 2000 and 2010 Decennial Censuses; SETDD calculations

Although Hamilton County's population increased by only 9.3 percent from 2000 to 2010, this growth accounted for more than 40 percent of total population growth in the region. Hamilton's substantial population increase comes from its being the largest municipality in Southeast Tennessee and because it is at the crossroads of several important transportation corridors including Interstates 75 and 24, U.S. Highway 27, and the Tennessee River. As can be seen in *Figure 2*, over 90 percent of all growth in the region occurred in counties that include the I-75 and U.S. 27 corridors.

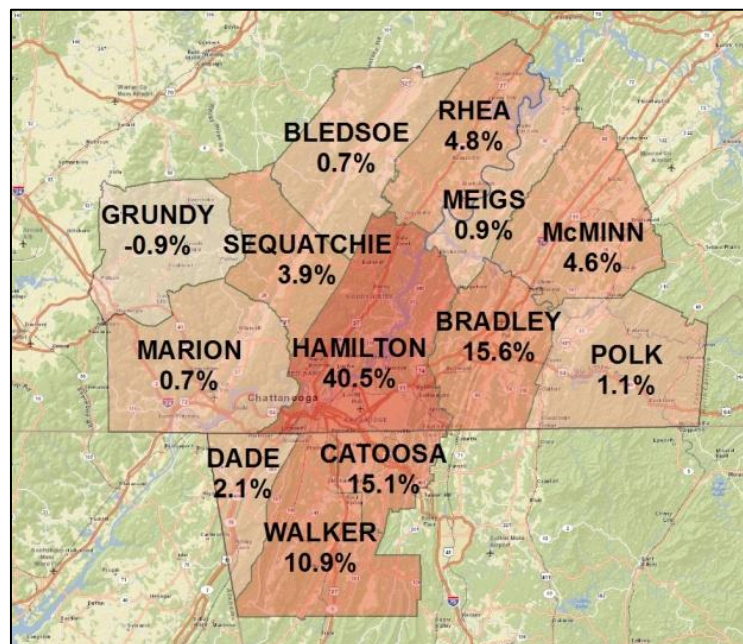


Figure 2. County Contribution to Overall Population Growth in the CEDS Region: 2000-2010

Source: SETDD

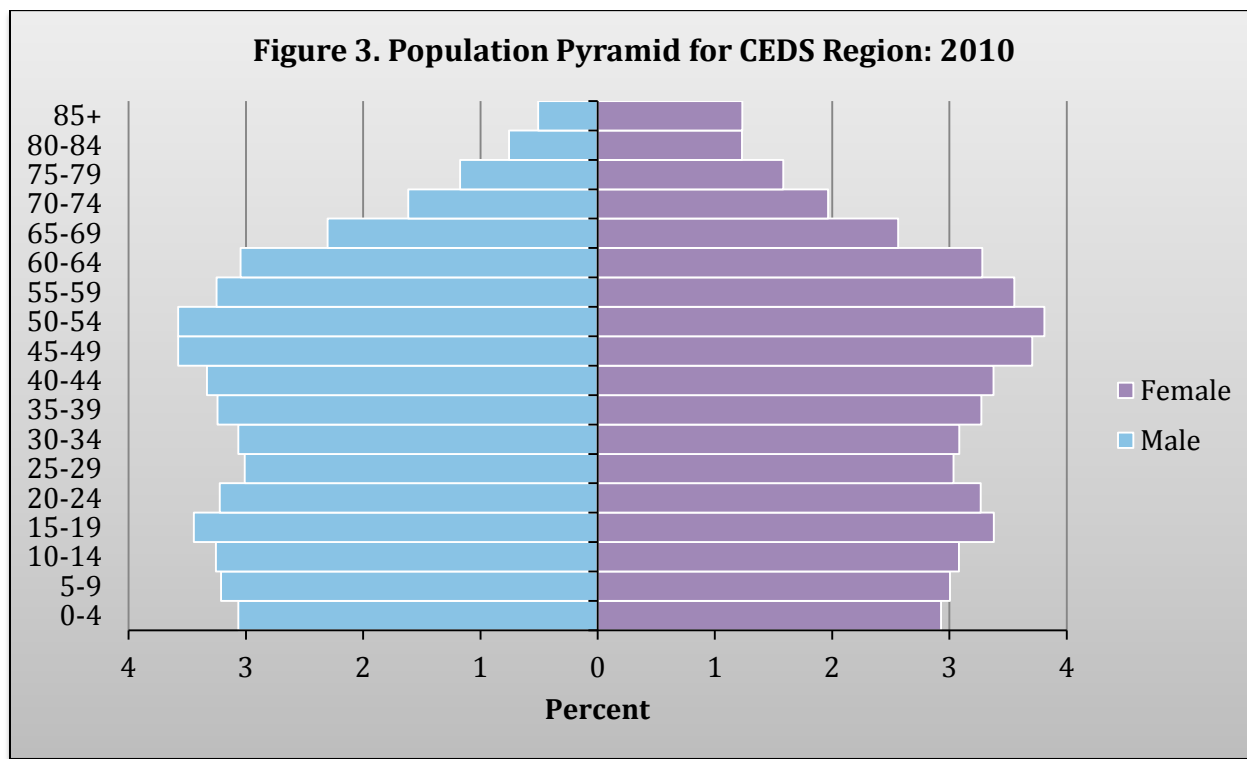
In addition to population increases from the natural growth rate, a large wave of immigration to the region is expected through 2015 as new industrial centers begin to come online. The new Volkswagen assembly plant is a new source of 2,000 direct jobs and as many as 12,000 indirect jobs associated with parts supplies. Wacker, a photovoltaics manufacturer, will bring at least 500 jobs to the Bradley County area. At an average of 2.5 persons per household, these two openings translate to some 30,000 additional people moving into the area. This will have a considerable impact on local housing, transportation, schools, and public infrastructure throughout the Northwest Georgia and Southeast Tennessee region.

Population: Major Findings

- The population continues to increase at a steady upward pace in the region, with some counties having witnessed very rapid growth since 2000. The enlarging population is attributed to the natural growth rate as well as to people moving into the region for new employment opportunities.
- U.S. Highway 27 and Interstate 75 are vital for regional growth. More than 90 percent of the region's population increases occurred in counties traversed by one or both of these transportation corridors.

Demographics

Population pyramids are useful for illustrating dynamic population patterns because they show the age-range distribution of males and females in a geographic area for a given year. *Figure 3* breaks males and females into 5-year age classifications and displays the results as percentages of the total regional population.



Source: U.S. Census Bureau, 2010 Decennial Census; SETDD Calculations

As the pyramid illustrates, there is a “bubble” of 45 to 64-year-olds which peaks in the 45-49 and the 50-54 age groups. This represents what is commonly referred to as the Baby Boomer generation—Americans born in the period of post-WWII prosperity that lasted from 1946 until 1964. Baby Boomers, who would have been between 46 and 64 years of age when the 2010 Census was administered, comprise 27.8 percent of the region’s population. It is essential that planners and local officials recognize this wave of aging citizens and prepare their communities to accommodate its needs.

Retiring Americans often relocate to places offering a range of recreational, cultural, and leisure activities. In choosing a destination, they also consider the availability health care and other assistance services. The Baby Boomer wave will present new challenges in the provision of services, both as seniors age locally and as new retirees move into the area. Many services will be provided by independent companies and non-profit organizations, resulting in an increase in the number of service-related jobs throughout the region. Local governments, too, must determine whether their infrastructure and social support programs can sufficiently handle the increased demand for public services.

Two additional trends are worth noting. First, there is a second bubble in the 10-14, 15-19, and 20-24 groups that is largely comprised of the grandchildren of Baby Boomers. This significant younger population means there is little likelihood of a gap in the future workforce. Anticipated growth in the health care, recreation, and service industries to accommodate the influx of retirees will provide employment for many in this rising workforce. Second, there are greater percentages of females than there are for males, especially in the higher age brackets. This is due to longer natural life expectancy for women. Overall, the region’s population consisted of 372,882 (48.7 percent) men and 393,456 (51.3 percent) women. For specific counts of males and females divided into age ranges for each county, please see *Appendix A*.

Demographics: Major Findings

- The first of the region’s 213,000 Baby Boomers have reached retirement age. More than a quarter of the regional population will celebrate its 65th birthday within the next two decades. It is essential for the CEDS to recognize this massive wave of retirees and for communities throughout the region position themselves not only to accommodate, but also to benefit from, this aging demographic group.
- Increases in the region’s health care, recreation, and service industries to accommodate the growing number of senior citizens will provide many employment opportunities for those entering the workforce today.
- If the region hopes to attract retirees from other areas, it should market itself as a desirable travel and retirement alternative to states such as Florida, North Carolina, and Arizona. A successful campaign will highlight the region’s low costs-of-living, health care networks, cultural and recreational activities, and close proximity to natural attractions and other tourist destinations.

GEOGRAPHY

The region's enviable access to major highway, water, air, and rail networks makes it attractive to manufacturing and logistics firms. In addition, Nashville, Knoxville, Atlanta, Huntsville, and Birmingham are each within a three-hour drive of Chattanooga. The CEDS region is thus ideally situated to propel growth in Southeast Tennessee and to support the regional economies of at least three other states.

The advantages of the region's proximity to other major cities, however, are often countered by severe challenges posed by the Southeast Tennessee's rugged landscape. Steep mountain slopes, expansive flood plains, and frequently poor soils present many difficulties for infrastructure expansion and new developments. Septic systems are prohibited on slopes that are 30 percent or greater. Also, there are large swaths of state and federal lands. In Polk County, two-thirds of the property is in public ownership, severely limiting much of its development potential. *Figure 4* illustrates areas with development restrictions.

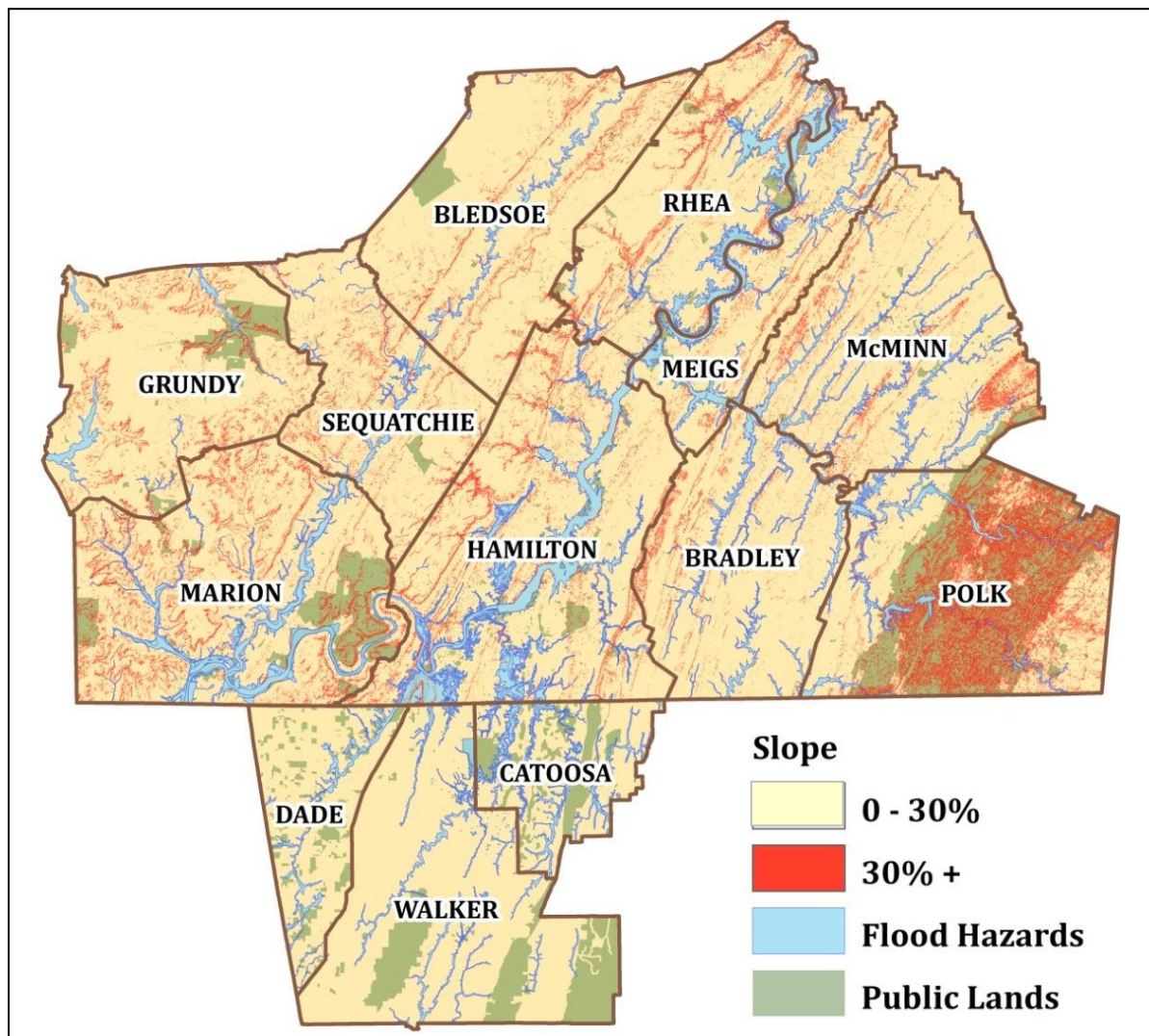


Figure 4. Development Restrictions in the CEDS Region

Source: SETDD

The remainder of this section considers how competition for limited land resources has necessitated development and land-use controls in many small and rural communities that have traditionally not imposed such regulations. These codes often face local opposition but are necessary to preserve property values, natural resources, and community character throughout the CEDS region.

Land Planning & Development Controls

The State of Georgia has a well-defined comprehensive planning process that requires a land use component. This process has been in place since the early 1990s.

In 1999, the Tennessee legislature passed a law requiring growth planning in all counties. These plans required the formation of a committee composed of the county mayor, all city mayors, and other officials to prepare a map showing all urban areas in the county; the future urban growth assumptions; growth areas in the county; and rural/recreation/conservation areas. Analyses were prepared to provide a basis for determining residential and industrial expansion capacities. These analyses took into account existing land use, prime farmland, conservation areas, and steep slopes. All land uses were mapped and submitted to the state for approval.

As a part of the state's 2011 Jobs4TN initiative, state-level planning activities administered under the Department of Economic and Community Development were eliminated; those duties were relinquished to local planning offices. The Development District has since "filled the gap," so to speak, in the Southeast region. Regional planners at the SETDD now provide local planning assistance to twenty CEDS communities. The District's Community Development office helps local communities administer their development codes, provides guidance on complex planning matters, and submits and administers a broad range of grants for local infrastructure projects and community development programs.

Land use ordinances vary from stringent in urban areas to nonexistent in the rural parts of the region. Most of the counties have subdivision regulations, but the state's enabling legislation largely restricts the ability of county governments to regulate developments where subdivision lots remain over 5 acres. In addition, most but not all municipalities in the region have zoning ordinances. See *Appendix B*, which contains excerpts from a 2011 report prepared by the state, for a reference list of Southeast Tennessee counties and municipalities that have subdivision regulations, zoning controls, and planning commissions, as well as those which do not.

Land Planning & Development Controls: Major Findings

- The SETDD has assumed many of the responsibilities previously performed by the state's planning offices. The District hopes to maintain current contracts and build new relationships with communities throughout the Southeast Tennessee region. Applying for grants and seeking support for local infrastructure projects, equipment and facility upgrades, and community programs remain top priorities of the SETDD.
- Controversies over new developments and proposals in unregulated regions arise on a weekly basis. The SETDD supports broader enabling authority that will allow local governments to manage growth, preserve property values, and enhance the character of their communities beyond what is currently permitted. District staff also encourage communities without zoning or subdivision regulations to consider them. Where traditional control mechanisms present barriers and stifle development, the SETDD proposes alternative regulatory measures such as form-based codes.

ECONOMY

This section discusses the economies of communities involved in the CEDS—in particular, how the region has fared since the 2008 recession and how the people of Southeast Tennessee and Northwest Georgia have been affected. It also analyzes strengths and weaknesses of the region's economy and how its competitive advantages have allowed the urban centers to recover more quickly than the States of Tennessee and Georgia as well as the nation as a whole. The goal is to identify for the CEDS specific strategies and steps that will continue this progress and enable the region to emerge with an even stronger economy than before.

Unemployment

Although the economy has slowly improved since the recession began in 2008, fewer people comprise today's labor force and unemployment rates remain stubbornly above pre-recession levels. As *Table 3* illustrates, 2009 was the worst year with unemployment soaring above 14 percent in some counties. The percentage of people who are unemployed has since decreased, but so too has the number of people looking for work. The labor forces in all counties except for Hamilton, Meigs, Rhea, and Sequatchie are smaller in 2012 than they were prior to the recession.

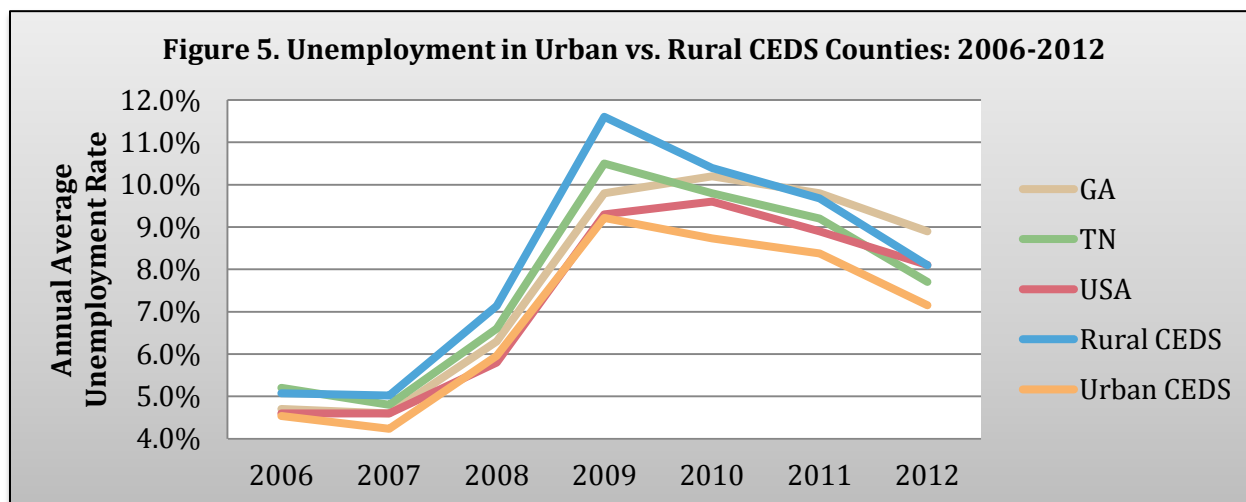
Table 3. County Labor Force and Unemployment Rates: 2006-2012

		2006	2007	2008	2009	2010	2011	2012
Catoosa County	Labor Force	36,125	35,410	35,585	34,309	33,842	34,216	34,290
	Unemployment	3.9%	3.7%	5.2%	8.4%	8.0%	7.8%	6.7%
Dade County	Labor Force	8,673	8,427	8,406	8,074	8,105	8,168	8,232
	Unemployment	4.2%	4.3%	5.7%	10.4%	8.8%	8.1%	7.6%
Walker County	Labor Force	33,784	33,050	33,261	31,910	32,968	33,159	33,199
	Unemployment	4.5%	4.5%	6.6%	10.8%	9.5%	8.7%	7.5%
Bledsoe County	Labor Force	4,860	4,880	4,910	4,900	4,890	4,900	4,830
	Unemployment	6.5%	6.0%	8.5%	14.2%	12.8%	11.2%	9.5%
Bradley County	Labor Force	48,020	47,660	47,470	47,010	47,640	47,870	46,590
	Unemployment	5.0%	4.7%	6.5%	9.6%	9.2%	9.0%	7.7%
Grundy County	Labor Force	5,890	5,920	5,940	5,970	6,080	6,060	5,790
	Unemployment	8.0%	6.2%	8.5%	14.1%	11.9%	11.7%	9.1%
Hamilton County	Labor Force	162,390	166,430	167,630	162,050	164,880	167,420	165,510
	Unemployment	4.4%	4.1%	5.8%	9.1%	8.6%	8.2%	7.0%
McMinn County	Labor Force	13,170	12,980	13,020	12,770	12,670	12,870	12,600
	Unemployment	5.7%	6.2%	7.8%	12.3%	10.6%	10.2%	8.1%
Marion County	Labor Force	24,790	24,580	24,010	23,400	23,430	23,820	23,260
	Unemployment	5.7%	5.8%	8.9%	14.0%	12.4%	11.2%	9.2%
Meigs County	Labor Force	4,890	4,870	4,960	5,100	5,220	5,260	5,140
	Unemployment	6.8%	6.5%	9.0%	14.5%	12.7%	11.7%	10.0%
Polk County	Labor Force	7,370	7,050	7,030	7,070	7,430	7,520	7,220
	Unemployment	5.6%	5.3%	8.2%	12.5%	11.4%	11.8%	9.2%
Rhea County	Labor Force	13,280	13,000	13,430	13,190	13,500	13,890	13,760
	Unemployment	6.3%	6.1%	8.1%	13.7%	12.5%	11.6%	9.5%
Sequatchie County	Labor Force	6,060	6,100	6,260	6,160	6,350	6,350	6,260
	Unemployment	4.5%	5.1%	7.7%	12.5%	10.7%	8.9%	7.5%

Source: Bureau of Labor Statistics, July 2012

Those who have retired, those not actively looking for work, and those collecting unemployment benefits are not considered a part of the labor force and are therefore excluded from unemployment calculations. Given the drops in labor force totals and the coinciding increases in most county populations from 2000 to 2010 (see *Table 2* on page 3), the actual number of unemployed is likely much higher. Moreover, workers in part-time or low-wage positions are

technically employed and therefore not included in the unemployment rate. A wholly accurate portrait of the labor force and health of the economy is thus difficult to construct.¹



Source: Bureau of Labor Statistics, July 2012; SETDD Calculations

The trend lines presented in *Figure 5* demonstrate that unemployment in the CEDS's rural region, which is comprised of all CEDS counties except Bradley (Cleveland) and Hamilton (Chattanooga), spiked higher than any other comparison area in 2009. The region's urban areas, meanwhile, have experienced consistently lower unemployment rates than any of the comparison regions measured here. Since the pinnacle of the so-called Great Recession, the urban counties have seen a quicker path to recovery than has Georgia, Tennessee, or the nation. The rural counties have lagged behind but should see unemployment fall below 8 percent by the end of 2012. However, as *Table 4* on the previous page shows, unemployment in the Georgia counties is substantially lower than in the rural Tennessee CEDS counties, an indication that high unemployment will persist until new jobs become available in rural Southeast Tennessee.

As the economy strengthens, the SETDD anticipates an expansion in the active labor force. Those not currently looking for work and others not presently represented in the federal unemployment rate will once again be counted as they recommence their job searches. There will also be an increase in job-switching, with a number current workers temporarily being counted as unemployed as they seek and transition to new and better jobs. Both of these factors may actually result in an *increase* in unemployment rates even though new jobs are being created.

Unemployment: Major Findings

- Unemployment in the urban CEDS communities is decreasing at a rate that outpaces both the states of Georgia and Tennessee as well as the nation as a whole.
- Even though the region's population increased by more than 10 percent over the past decade, the size of the labor force in most counties has remained consistent or decreased since 2006. Growth in the region's workforce is expected as the economy improves.
- New employment opportunities are needed, especially for rural counties in the region.

Table 4. Annual Income of CEDS Households: 2010

	Median HH Income	Mean HH Income	\$0-10K	\$10-15K	\$15-25K	\$25-35K	\$35-50K	\$50-75K	\$75-100K	\$100- 150K	\$150- 200K	\$200K+
GEORGIA	\$ 46,430	\$ 62,967	318,738	210,861	424,718	397,201	493,955	634,331	385,731	373,231	130,060	113,594
Catoosa County	\$ 46,544	\$ 58,140	1,443	1,440	2,886	3,434	3,680	4,720	3,048	2,573	488	386
Dade County	\$ 39,760	\$ 52,397	535	455	867	825	1,074	1,088	665	570	96	87
Walker County	\$ 38,723	\$ 49,721	2,210	2,028	3,789	3,765	4,411	4,664	2,746	1,444	522	322
GA SUBTOTAL	\$ 42,188	\$ 53,625	4,188	3,923	7,542	8,024	9,165	10,472	6,459	4,587	1,106	795
	Percentage		7.4%	7.0%	13.4%	14.3%	16.3%	18.6%	11.5%	8.2%	2.0%	1.4%
TENNESSEE	\$ 41,461	\$ 56,835	230,207	179,881	325,916	303,519	378,370	443,178	247,578	209,150	60,928	61,936
Bledsoe County	\$ 29,729	\$ 37,346	543	406	812	576	1,026	611	346	102	0	8
Bradley County	\$ 40,032	\$ 54,432	3,502	2,594	5,017	4,995	6,613	6,718	3,915	2,583	801	738
Grundy County	\$ 26,529	\$ 35,640	854	571	1,067	764	716	736	360	124	61	5
Hamilton County	\$ 45,408	\$ 64,055	11,069	8,587	17,405	16,230	19,075	23,867	15,566	12,889	4,444	4,821
McMinn County	\$ 37,146	\$ 48,862	2,037	1,829	3,115	2,963	2,840	4,133	1,711	1,704	244	234
Marion County	\$ 38,785	\$ 50,413	1,295	990	1,676	1,241	1,761	2,062	1,007	915	169	189
Meigs County	\$ 33,506	\$ 46,642	536	480	737	624	451	841	615	213	42	19
Polk County	\$ 34,027	\$ 44,501	626	781	953	894	782	1,227	655	260	91	42
Rhea County	\$ 36,761	\$ 44,850	1,344	967	1,674	1,570	2,186	2,375	842	669	144	90
Sequatchie Co.	\$ 33,850	\$ 45,740	578	344	1,013	670	687	874	572	262	30	53
TN SUBTOTAL	\$ 41,656	\$ 57,324	22,384	17,549	33,469	30,527	36,137	43,444	25,589	19,721	6,026	6,199
	Percentage		9.3%	7.3%	13.9%	12.7%	15.0%	18.0%	10.6%	8.2%	2.5%	2.6%
REGION TOTAL	\$ 41,757	\$ 56,624	26,572	21,472	41,011	38,551	45,302	53,916	32,048	24,308	7,132	6,994
	Percentage		8.9%	7.2%	13.8%	13.0%	15.2%	18.1%	10.8%	8.2%	2.4%	2.4%

Source: U.S. Census Bureau, 2010 Decennial Census; Bureau of Labor Statistics, July 2012; SETDD Calculations

Income and Wages

As Table 4 on the previous page illustrates, the median household income across the entire CEDS region is \$41,757. The mean household income is \$56,652. Sixty percent of the region's households make less than \$50,000 a year. Twelve percent of households have incomes totaling \$100,000 a year or more.

Table 5 below shows the per capita income levels (PCI) for workers in the CEDS region. Incomes increased in every county from 2000 to 2010. People living in Hamilton County have the highest annual incomes; those in Bledsoe and Grundy Counties make the least. As is noted in the next section, the federal poverty threshold for individuals in 2010 was \$11,139.

Table 5. Per Capita Income for CEDS Counties: 2000-2010

	2000	2010
Georgia	\$28,541	\$34,747
Catoosa	\$22,723	\$28,446
Dade	\$21,129	\$26,374
Walker	\$21,973	\$26,506
GA CEDS Average	\$22,183	\$27,322
Tennessee	\$26,689	\$34,921
Bledsoe	\$17,702	\$23,666
Bradley	\$23,364	\$30,030
Grundy	\$17,633	\$24,751
Hamilton	\$30,433	\$38,368
McMinn	\$20,855	\$27,568
Marion	\$21,912	\$30,797
Meigs	\$18,149	\$27,502
Polk	\$20,450	\$26,749
Rhea	\$20,033	\$26,096
Sequatchie	\$19,698	\$30,456
TN CEDS Average	\$21,344	\$27,232
REGION AVERAGE	\$21,500	\$27,249
USA	\$30,319	\$39,937

Source: Bureau of Economic Analysis; SETDD Calculations

Annual Income: Major Findings

- Sixty percent of the region's households make less than \$50,000 a year. Twelve percent of households have incomes totaling \$100,000 a year or more.
- Per capita incomes in CEDS Counties are lower than the average incomes in both Georgia and Tennessee. In 2010, the PCI of the average CEDS resident was 68.2 percent that of what the average worker earns nationally—a gap of more than \$12,600. Counties with PCIs less than 80 percent of the national level may be classified as “EDA Distressed.”

Poverty

An individual is considered to be living in poverty when his or her pre-tax income is insufficient to meet basic needs such as food and housing. The federal government utilizes 48 thresholds to determine poverty status, taking into account factors such as age and family size. The thresholds are adjusted for inflation according to the Consumer Price Index. Whenever a family is considered to be in poverty, then all persons in that family are also considered to be living in poverty. The federal poverty thresholds are applied uniformly across the United States and do not factor geography into the equation.

In 1990, the poverty threshold for an individual was \$6,652, and for a family of four, \$13,254. An individual making \$8,794 or less in 2000 was considered to be living in poverty; for a family of four, the 2000 threshold was \$17,463. The poverty thresholds at the time of the 2010 Census were \$11,139 and \$22,314 for individuals and families of four, respectively. As costs of living have increased, so too have the federally designated poverty thresholds.

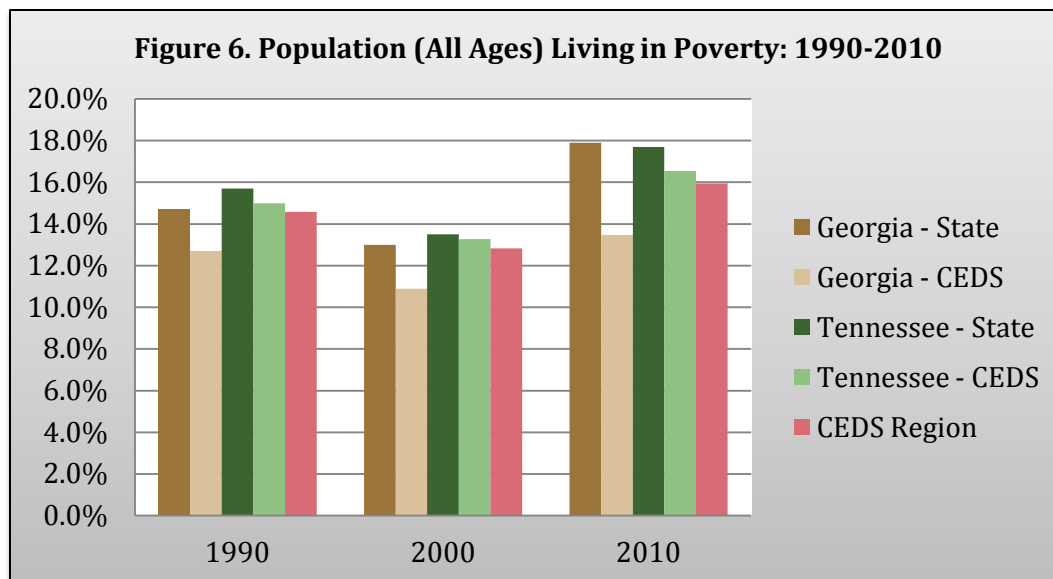
The poverty rate for the United States in 2010 was 15.1 percent. The CEDS region, with a rate of 16.0 percent, saw poverty levels higher than the national rate but lower than both Georgia and Tennessee. Forecasts predict the national rate will rise above 15.7 percent this year—a level not seen since 1965.²

As *Table 6* illustrates, poverty measured across the entire population decreased from 1990 to 2000 in every county except Grundy. From 2000 to 2010, however, poverty increased across the board: some counties returned to their 1990 rates; others jumped to levels not recorded in nearly a half-century.³ Between one-fifth and one-third of children are living in poverty in most of the region's counties with the exceptions of Meigs and Grundy, where the data indicate nearly one out of every two children is living in poverty. As many as one in four families is impoverished in some counties. Interestingly, the poverty rate for seniors (age 65+) has decreased over the past three censuses, a trend explored in greater detail by *Figure 8* on page 14.

Table 6. Poverty Rates in CEDS Counties: 1990-2010

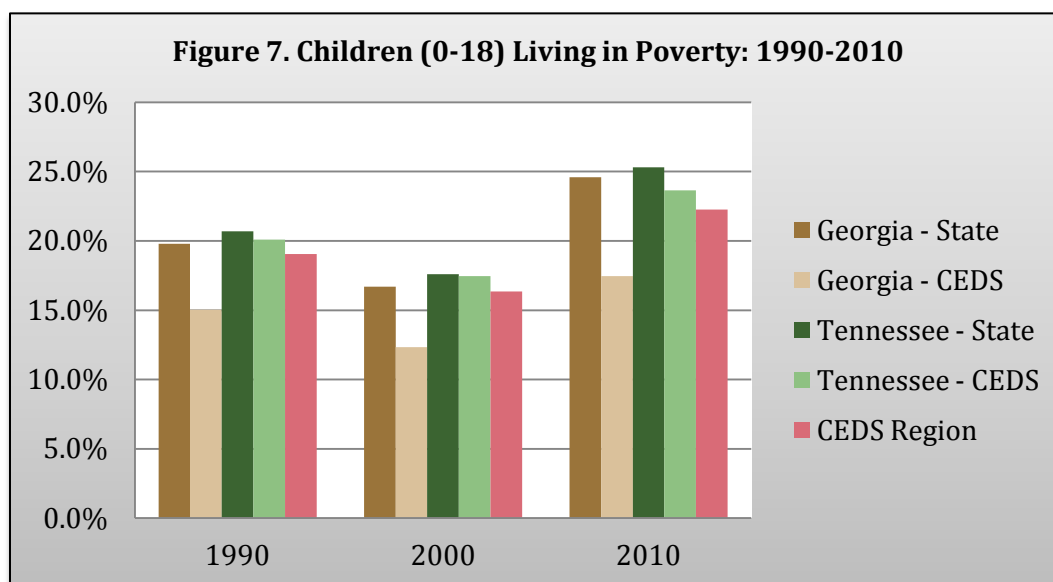
		1990	2000	2010
GEORGIA	Population	14.7%	13.0%	17.9%
	Children (0-18)	19.8%	16.7%	24.6%
	Elderly (65+)	20.4%	13.5%	10.7%
	Families	11.5%	9.9%	13.7%
Catoosa County	Population	12.0%	9.4%	11.2%
	Children (0-18)	14.2%	9.9%	14.1%
	Elderly (65+)	19.4%	11.0%	9.0%
	Families	9.7%	6.4%	8.5%
Dade County	Population	14.6%	9.7%	15.5%
	Children (0-18)	16.1%	8.4%	25.2%
	Elderly (65+)	27.0%	12.5%	10.8%
	Families	13.2%	7.5%	10.7%
Walker County	Population	12.8%	12.5%	15.1%
	Children (0-18)	15.4%	15.7%	19.8%
	Elderly (65+)	18.3%	11.7%	8.1%
	Families	9.9%	10.0%	11.6%
GA SUBTOTAL	Population	12.7%	10.9%	13.5%
	Children (0-18)	15.0%	12.3%	17.5%
	Elderly (65+)	19.6%	11.5%	8.7%
	Families	10.2%	8.2%	10.2%
TENNESSEE	Population	15.7%	13.5%	17.7%
	Children (0-18)	20.7%	17.6%	25.3%
	Elderly (65+)	20.9%	13.5%	9.7%
	Families	12.4%	10.3%	13.4%
Bledsoe County	Population	19.2%	18.1%	23.1%
	Children (0-18)	20.5%	21.0%	32.8%
	Elderly (65+)	28.6%	23.2%	18.3%
	Families	16.3%	14.9%	19.1%
Bradley County	Population	13.8%	12.2%	16.0%
	Children (0-18)	18.2%	15.4%	19.8%
	Elderly (65+)	20.8%	11.6%	10.8%
	Families	11.3%	9.0%	11.6%
Grundy County	Population	23.9%	25.8%	31.5%
	Children (0-18)	28.5%	23.6%	45.9%
	Elderly (65+)	25.4%	31.5%	14.0%
	Families	21.0%	22.6%	26.6%
Hamilton County	Population	13.1%	12.1%	14.7%
	Children (0-18)	18.4%	16.8%	21.6%
	Elderly (65+)	15.6%	11.2%	8.8%
	Families	10.2%	9.2%	11.1%
McMinn County	Population	17.2%	14.5%	17.3%
	Children (0-18)	22.5%	18.2%	23.9%
	Elderly (65+)	23.7%	16.8%	11.9%
	Families	14.3%	10.9%	13.7%
Marion County	Population	19.3%	14.1%	18.7%
	Children (0-18)	24.9%	20.0%	25.8%
	Elderly (65+)	27.5%	14.3%	10.5%
	Families	16.2%	10.8%	15.3%
Meigs County	Population	22.3%	18.3%	25.2%
	Children (0-18)	25.8%	23.5%	44.6%
	Elderly (65+)	29.5%	14.6%	23.4%
	Families	18.5%	15.8%	21.5%
Polk County	Population	18.3%	13.0%	18.4%
	Children (0-18)	25.1%	13.8%	23.3%
	Elderly (65+)	25.4%	18.4%	11.7%
	Families	14.2%	9.7%	15.3%
Rhea County	Population	19.0%	14.7%	19.1%
	Children (0-18)	23.8%	19.0%	25.8%
	Elderly (65+)	23.4%	15.2%	10.7%
	Families	15.8%	11.4%	14.2%
Sequatchie County	Population	22.9%	16.5%	21.8%
	Children (0-18)	27.7%	21.5%	31.7%
	Elderly (65+)	28.8%	20.3%	13.6%
	Families	19.9%	13.5%	15.8%
TN SUBTOTAL	Population	15.0%	13.3%	16.6%
	Children (0-18)	20.1%	17.5%	23.7%
	Elderly (65+)	19.1%	13.2%	10.2%
	Families	12.1%	10.2%	12.7%
REGION TOTAL	Population	14.6%	12.8%	16.0%
	Children (0-18)	19.1%	16.4%	22.3%
	Elderly (65+)	19.2%	12.9%	9.9%
	Families	11.8%	9.8%	12.2%

Source: U.S. Census Bureau, 1990-2010 Decennial Censuses; SETDD Calculations



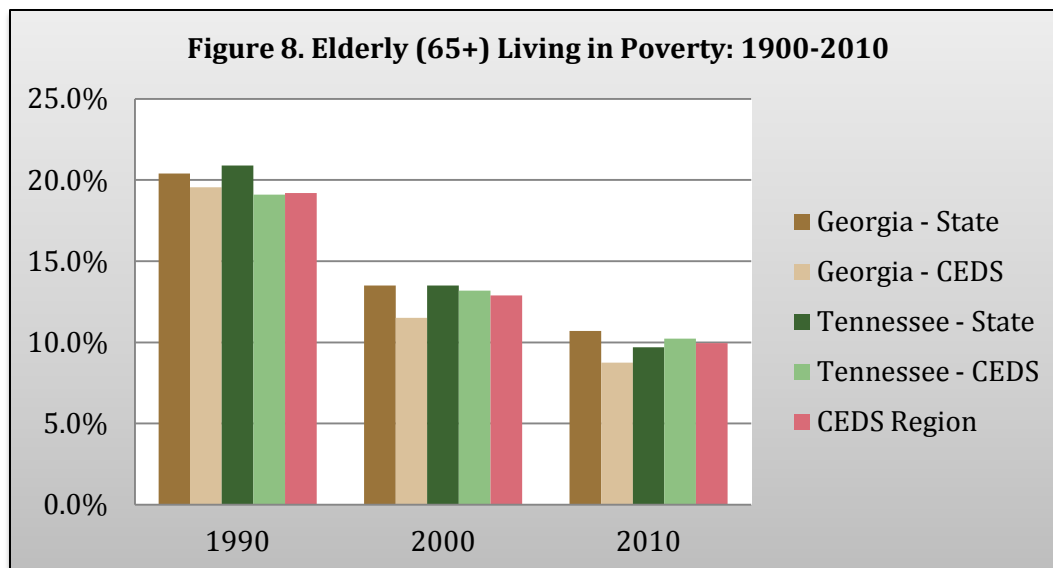
Source: U.S. Census Bureau, 1990-2010 Decennial Censuses; SETDD Calculations

The above chart shows that the poverty rates measured across the entire population—that is, for all ages—decreased from 1990 to 2000 then increased in 2010. While the CEDS counties in Tennessee trended approximately even with, and just slightly below, the poverty rate for the state of Tennessee, the CEDS counties in Georgia have experienced significantly lower poverty rates than the entire state, especially in 2010. Poverty for counties in the CEDS region has always been below the levels for both Georgia and Tennessee.



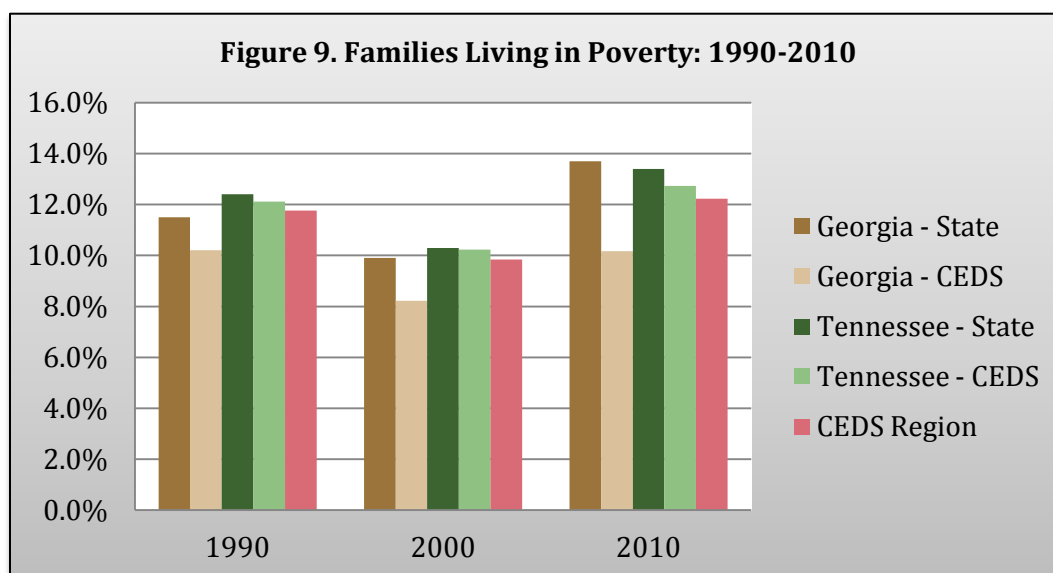
Source: U.S. Census Bureau, 1990-2010 Decennial Censuses; SETDD Calculations

The high 2010 childhood poverty rates observed in Grundy and Meigs Counties are not reflected when weighted into the entire CEDS region. Still, the rates are the highest in decades. One-quarter of persons under the age of 18 in Georgia and Tennessee are shown to be living in poverty.



Source: U.S. Census Bureau, 1990-2010 Decennial Censuses; SETDD Calculations

Even as poverty rates for the population as a whole have increased to levels not seen in nearly fifty years, the proportion of senior citizens living in poverty is half of what it was in 1990. Demographers attribute this decline to public assistance programs that specifically benefit the elderly, including Medicare and Social Security.⁴



Source: U.S. Census Bureau, 1990-2010 Decennial Censuses; SETDD Calculations

According to Peter Edelman, director of the Georgetown Center on Poverty, Inequality and Public Policy, the increase in poverty among families (see *Figure 9*) as well as the general population may be attributed to both the economic downturn that started in 2008 as well as “longer-term changes... such as globalization, automation, outsourcing, immigration, and less unionization that have pushed median household income lower.”⁵ Unemployment, underemployment, plus a “tidal wave of low-wage jobs” have in turn driven record numbers of Americans to seek government assistance to help cover the costs of education, health care, housing, utilities, and food.

Enrollment in the federal Supplemental Nutrition Assistance Program (SNAP) swelled from 17.3 million in 2001 to more than 44.7 million in 2011—a 158 percent increase.⁶ The most recent county-level SNAP enrollment figures are from 2009. *Table 7* below shows the official 2009 participation rates as well as estimates for 2012, which the SETDD has calculated based on the 2009-2012 changes in enrollment at the state level for Georgia and Tennessee. In 2012, 20.0 percent of Georgia’s population and 21.2 percent of Tennessee’s received SNAP benefits.

Table 7. Proportion of Population Receiving SNAP Benefits: 2009-2012

	SNAP Enrollment	
	2009 Actual	2012 Estimate
Catoosa County	13.0%	19.9%
Dade County	11.0%	16.8%
Walker County	16.0%	24.5%
Bledsoe County	25.0%	31.1%
Bradley County	18.0%	22.4%
Grundy County	36.0%	44.8%
Hamilton County	15.0%	18.7%
McMinn County	20.0%	24.9%
Marion County	23.0%	28.6%
Meigs County	27.0%	33.6%
Polk County	23.0%	28.6%
Rhea County	25.0%	31.1%
Sequatchie County	25.0%	31.1%

Source: Food Research and Action Center; SETDD Calculations

Revenue shortfalls at local, state, and federal levels of combined with political pressure to rein in government spending mean many public assistance programs are on shaky financial footing and face an uncertain future. Until the number of people working in living-wage jobs increases, high poverty rates will persist and economic growth at all levels will continue to remain sluggish.

Poverty: Major Findings

- For persons of all ages, both Georgia (17.9) and Tennessee (17.7) had poverty rates above the national rate of 15.1 percent in 2010. At 16.0 percent, the CEDS region had a lower average poverty rate than either state, yet this was still higher than the national rate.
- CEDS counties in Georgia and the urban Tennessee counties of Bradley and Hamilton had the lowest rates. In the rural Tennessee region, 20.3 percent of the total population and 29.3 percent of all children were living in poverty as of 2010.
- Support programs such as Medicare and Social Security have driven the poverty rate for the region’s seniors down to 9.9 percent—less than half of the level from just twenty years ago.
- Although public assistance programs provide interim relief for needy individuals and families, the only sustainable way to decrease poverty in the long run is to increase the number of living-wage jobs and to ensure the local workforce is trained to work these jobs. Communities in rural Tennessee are in greatest need of new, well-paying employment opportunities.

Economic Clusters

The North American Industry Classification System (NAICS) is an economic categorization system that analyzes the labor force in a given area and dissects the allocation of jobs into a standardized taxonomy of industries. The analysis which follows utilizes sector-level industry data, that is, how commercial establishments divide into various economic sectors. The figures presented in *Tables 8* and *9* on the next page are derived from Bureau of Labor Statistics calculators and represent the total number of private sector jobs in each economic sector within the specified geographic area.

Sector classifications are federally designated and allow for comparisons to be made across different geographic regions. Location quotients (LQs) are one of the most common methods for comparing and contrasting the complexion of a local economy. The LQ technique calculates a sector's contribution to the total local economy and then compares that proportion to the economy of some reference unit—in this case, the national economy. The formula for calculating location quotients is:

$$LQ = \frac{e_i/e}{E_i/E} \quad \text{where}$$

e_i = local employment in industry i
 e = total local employment
 E_i = national employment in industry i
 E = total national employment

The resulting LQ value is a ratio interpreted in relation to 1.00. If equal to 1.00, that sector's contribution to the local economy is proportionately identical to the sector's contribution to the national economy. Within the CEDS region, the LQ values for Retail Trade were 1.02 and 0.99 for 2001 and 2011, respectively, an indication that the proportion of people in Retail Trade occupations is nearly identical to the proportion of all people working in Retail Trade across the entire United States.

When the result is less than 1.00, it means the number of workers employed in that sector is lower than the national average. For example, the Construction sector had a LQ of 0.74 in 2001 and 0.84 in 2011. Because both are less than 1.00, we can conclude that Construction has comprised a smaller portion of the regional economy over the last decade than it has nationally: for every 100 employees in the Construction field at the national level in 2011, the region had only 84. The exact opposite is true when the LQs are greater than 1.00. In 2011, the LQs for the Manufacturing and Trade and Warehousing sectors equaled 1.80—a sign that employment in these occupations is higher in comparison to the rest of the country.

When comparing values across years, one must consider the multiple variables that contribute to the LQ equation. If the ratio increases as it did for Construction, it means that employment in construction-related fields within the region grew (thus increasing the numerator), that Construction as a component of the national economy shrank (resulting in a decrease in the denominator), or some combination of these two. Looking at the actual Construction employment numbers in *Tables 8* and *9* reveals that it is the third scenario. The LQ technique provides a useful snapshot of the regional economy, but the ratios should always be interpreted with regard to the actual employment numbers as well as outside factors that can alter local and national economic structures over time.

Table 8. NAICS Classification of Regional Private Sector Employment: 2001

NAICS Sector-Level Industry	U.S.	Bledsoe	Bradley	Catoosa	Dade	Grundy	Hamilton	McMinn	Marion	Meigs	Polk	Rhea	Sequatchie	Walker	CEDS Region	LQ
Total, all industries	109,304,802	1,303	31,383	12,545	2,702	1,200	163,097	14,021	5,635	1,358	2,008	7,988	2,027	11,949	257,216	1.00
Agriculture, forestry, fishing and hunting	1,170,570	ND	ND	ND	NC	ND	628	ND	ND	ND	ND	90	ND	ND	718	0.26
Mining, quarrying, and oil and gas extraction	535,189	ND	ND	ND	NC	ND	209	ND	ND	ND	ND	30	ND	ND	239	0.19
Utilities	599,899	ND	35	ND	ND	ND	311	ND	ND	ND	ND	ND	ND	ND	346	0.25
Construction	6,773,512	74	1,307	335	144	54	8,139	689	159	37	47	263	44	455	11,747	0.74
Manufacturing	16,386,001	536	11,923	2,384	970	250	29,990	6,126	1,736	684	465	4,716	851	5,704	66,335	1.72
Wholesale trade	5,730,294	ND	1,924	ND	31	ND	6,956	371	ND	37	64	44	166	439	10,032	0.74
Retail trade	15,179,753	176	3,954	2,350	553	230	22,638	2,023	1,132	133	289	804	269	1,862	36,413	1.02
Professional and technical services	6,871,441	ND	706	137	34	ND	7,258	ND	ND	8	38	115	ND	185	8,481	0.52
Management of companies and enterprises	1,716,130	NC	252	81	NC	ND	3,147	ND	ND	ND	NC	NC	ND	9	3,489	0.86
Administrative and waste services	7,737,320	ND	1,450	286	57	ND	10,962	290	235	ND	39	99	31	373	13,822	0.76
Educational services	1,883,564	NC	ND	16	ND	ND	2,328	ND	NC	NC	NC	ND	NC	ND	2,344	0.53
Health care and social assistance	12,966,103	113	ND	2,027	ND	ND	14,245	ND	545	93	243	ND	197	ND	17,463	0.57
Transportation and warehousing	4,138,146	ND	872	2,069	ND	73	17,839	ND	191	ND	ND	ND	ND	ND	21,044	2.16
Information	3,591,995	ND	292	87	ND	32	2,568	150	27	NC	24	26	ND	ND	3,206	0.38
Finance and insurance	5,642,689	53	1,074	427	102	46	12,335	411	231	ND	148	166	97	337	15,427	1.16
Real estate and rental and leasing	2,036,285	13	419	102	15	11	2,392	180	48	ND	26	49	15	72	3,342	0.70
Arts, entertainment, and recreation	1,784,330	NC	213	110	11	NC	1,978	207	ND	ND	262	39	28	357	3,205	0.76
Accommodation and food services	10,100,636	25	2,079	1,120	309	123	13,790	978	ND	ND	245	720	135	712	20,236	0.85
Other services, except public administration	4,206,345	15	1,462	366	ND	10	5,291	243	141	15	39	108	ND	340	8,030	0.81
Unclassified	254,603	ND	4	73	ND	NC	94	3	NC	NC	NC	NC	NC	ND	174	0.29

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2001; SETDD Calculations

Table 9. NAICS Classification of Regional Private Sector Employment: 2011

NAICS Sector-Level Industry	U.S.	Bledsoe	Bradley	Catoosa	Dade	Grundy	Hamilton	McMinn	Marion	Meigs	Polk	Rhea	Sequatchie	Walker	CEDS Region	LQ
Total, all industries	108,165,289	708	30,599	10,507	2,335	1,230	156,816	13,365	5,764	1,307	1,671	7,361	1,536	9,111	242,310	1.00
Agriculture, forestry, fishing and hunting	1,160,037	ND	ND	35	ND	ND	ND	ND	ND	12	ND	19	17	ND	83	0.03
Mining, quarrying, and oil and gas extraction	729,930	ND	ND	NC	NC	ND	ND	ND	ND	NC	ND	26	58	ND	84	0.05
Utilities	549,942	ND	ND	ND	ND	ND	179	ND	ND	ND	ND	ND	ND	NC	179	0.15
Construction	5,470,906	72	1,386	387	ND	32	7,055	506	100	25	40	236	34	414	10,287	0.84
Manufacturing	11,701,587	56	7,958	1,254	515	186	23,079	4,566	1,389	760	177	3,200	83	3,881	47,104	1.80
Wholesale trade	5,544,792	25	ND	ND	35	17	6,338	457	ND	ND	ND	71	153	233	7,329	0.59
Retail trade	14,665,100	98	4,242	2,449	389	247	18,562	2,025	1,084	146	323	1,131	363	1,411	32,470	0.99
Professional and technical services	7,670,881	17	679	156	85	ND	7,933	ND	ND	ND	32	ND	ND	ND	8,902	0.52
Management of companies and enterprises	1,914,283	NC	299	89	NC	ND	958	ND	ND	ND	NC	ND	ND	ND	1,346	0.31
Administrative and waste services	7,710,134	4	2,167	128	33	31	11,859	868	208	11	46	467	57	170	16,049	0.93
Educational services	2,534,354	NC	ND	23	293	NC	2,566	ND	ND	NC	ND	ND	NC	7	2,889	0.51
Health care and social assistance	16,486,080	134	ND	1,908	200	339	22,303	ND	ND	99	ND	ND	232	938	26,153	0.71
Transportation and warehousing	4,055,183	ND	1,931	939	ND	ND	13,000	ND	337	ND	29	ND	ND	133	16,369	1.80
Information	2,675,278	ND	281	58	ND	32	2,879	131	41	ND	ND	49	6	47	3,524	0.59
Finance and insurance	5,507,056	53	1,064	319	105	64	12,440	475	221	ND	ND	163	151	360	15,415	1.25
Real estate and rental and leasing	1,909,455	26	241	124	11	13	2,196	114	15	ND	ND	28	13	27	2,808	0.66
Arts, entertainment, and recreation	1,922,524	NC	173	244	NC	ND	2,145	98	19	ND	359	49	7	236	3,330	0.77
Accommodation and food services	11,371,675	27	2,856	1,484	272	ND	17,632	1,175	916	ND	247	665	239	756	26,269	1.03
Other services, except public administration	4,406,825	ND	1,019	388	162	31	5,595	275	200	ND	ND	103	24	298	8,095	0.82
Unclassified	179,265	NC	1	20	ND	NC	6	NC	NC	NC	NC	NC	NC	20	47	0.12

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2011; SETDD Calculations

ND = Not Disclosable

NC = Not Calculable; the data does not exist or it is zero

Table 10 below separates the LQ ratios for Hamilton and Bradley from those for other counties in the region. The purpose of this is to isolate the more urban communities from its rural zones. Looking at the LQ values for Hamilton County reveals that employment in the Manufacturing, Transportation and Warehousing, and Finance and Insurance sectors is stronger in the Chattanooga area than it is nationwide. Employment in Manufacturing is very high throughout both rural and urban counties in comparison to the U.S. as a whole. In terms of economic balance over the past decade, Hamilton County possesses the economic mix that most closely follows employment trends nationwide. Yet even this urban center reports disproportionately low private sector employment in sectors such as Utilities, Professional and Technical Services, and Information.

Table 10. Location Quotients for Urban vs. Rural SETDD Counties: 2001-2011

NAICS Sector-Level Industry	Hamilton County (Chattanooga)		Bradley County (Cleveland)		Rural Counties	
	2001	2011	2001	2011	2001	2011
Agriculture, forestry, fishing and hunting	0.36	N/A	N/A	N/A	0.13	0.14
Mining, quarrying, and oil and gas extraction	0.26	N/A	N/A	N/A	0.10	0.23
Utilities	0.35	0.22	0.20	N/A	N/A	N/A
Construction	0.81	0.89	0.67	0.90	0.59	0.85
Manufacturing	1.23	1.36	2.53	2.40	2.60	3.47
Wholesale trade	0.81	0.79	1.17	N/A	0.35	0.51
Retail trade	1.00	0.87	0.91	1.02	1.13	1.57
Professional and technical services	0.71	0.71	0.36	0.31	0.13	0.07
Management of companies and enterprises	1.23	0.35	0.51	0.55	0.09	0.09
Administrative and waste services	0.95	1.06	0.65	0.99	0.32	0.74
Educational services	0.83	0.70	N/A	N/A	0.01	0.25
Health care and social assistance	0.74	0.93	N/A	N/A	0.43	0.46
Transportation and warehousing	2.89	2.21	0.73	1.68	0.98	0.70
Information	0.48	0.74	0.28	0.37	0.17	0.36
Finance and insurance	1.47	1.56	0.66	0.68	0.62	0.85
Real estate and rental and leasing	0.79	0.79	0.72	0.45	0.45	0.50
Arts, entertainment, and recreation	0.74	0.77	0.42	0.32	0.99	1.14
Accommodation and food services	0.91	1.07	0.72	0.89	0.75	1.21
Other services, except public administration	0.84	0.88	1.21	0.82	0.53	0.79
Unclassified	0.25	0.02	0.05	0.02	0.52	0.44

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2001-2011; SETDD Calculations

If any of the numbers in the NAICS and LQ tables is unexpected, the most likely explanation is these tabulations do not include public or government employees. Consider, for example, the low LQ values for Utilities: power, water, and sewage treatment workers are often public employees. While 2011 private-sector employment in Utilities totaled 179 across the region, there were also approximately 4,000 public Utilities employees in Hamilton County and an additional 1,000 throughout the region.⁷ TVA and EPB, both public utility entities with substantial presences in Southeast Tennessee, accounted for approximately 4,270 jobs as of February 2012.⁸ If public utility employees are included in the LQ tabulation, the adjusted ratio for Utilities in 2011 comes to 2.98, giving the region an employment rate in this sector nearly three times that of the nation as a whole.

However, public employees are frequently omitted, as analyses of economic multipliers and other measures of economic health are more accurate when limited to a region's privately owned businesses. Therefore, only private sector employees as counted by the Bureau of Labor Statistics are presented here.

Economic Clusters: Major Findings

- Sector-level location quotient analyses show the continued prominence of Transportation and Warehousing as well as Manufacturing in the CEDS region. Hamilton County also has a greater concentration of Finance and Insurance jobs compared to the nation as a whole. Employment in the Retail Trade sector has increased over the past ten years in rural communities.
- NAICS data in the Bureau of Labor Statistics' LQ calculators are limited to *private* sector employment. Given the large number of education, utility, energy, and other *public* employees in the CEDS region, supplemental economic analyses that incorporate both public and private sector data may be prove informative. The SETDD thus recommends updating the Tri-State Regional Workforce Alliance's 2010 economic analysis report once the regional and national economies stabilize.

Major Employers

Table 11 on the next page identifies the top five employment centers, both public and private, for each county in the CEDS region. Hamilton County contains the largest employers by far. Grundy County's largest business employs just 100 people. The locations of the CEDS region's largest employers can be seen in Figure 12 on page 33.

Manufacturers are among the top five employers in nearly every CEDS county. Various public institutions such as prisons, schools, and utilities fall within the top five employers in many counties. In Bledsoe County, the Taft juvenile correctional facility, the Southeastern Tennessee Regional Correctional Institution, and Fall Creek Falls State Park are the top three employers, and they are all owned and operated by the State of Tennessee. However, the Taft center has been ordered closed by the state and is in the process of ending operations; its final three inmates were transferred to other institutions in July 2012. The Taft center joins Dura Automotive Systems and Eclipse Manufacturing Company as the third top-five employer to close its doors in Pikeville within the past three years.

Major Employers: Findings

- Manufacturing, health care, and various public-sector operations including government administration and K-12 education contribute to the list of top-five employers in every CEDS County.
- SEIDA and the SETDD are committed to bringing new employers to the entire CEDS region—rural counties in particular, where the loss of even one or two major employers can have widespread repercussions for the residents, governments, and overall economic vitality of those communities.

Table 11. Largest Employers in Each CEDS County: 2012

	Company	Business Description	Gov?	Employees
Catoosa	Shaw Industries Group, Inc.	Wholesale trade	N	425
	Wal-Mart Supercenter	Grocery & retail store	N	400
	Aladdin Manufacturing Corp.	Yarn & textile mfg.	N	300
	Shaw Industries Group, Inc.	Wholesale trade	N	218
	Lakeview-Ft. Oglethorpe High School	K-12 education	Y	200
Dade	Gill Industries, Inc.	Metal fabrication	N	185
	Gill Industries, Inc.	Automobile parts mfg.	N	170
	Stone Forestry Service, Inc.	Forestry services	N	160
	Dade Elementary School	K-12 education	Y	145
	Wildwood Lifestyle Center & Hospital	Health care	N	130
Walker	Roper Corporation (General Electric)	Cook-top stove mfg.	N	1,400
	Shaw Industries Group, Inc. (including Synthetic Industries)	Yarn & textile mfg.	N	750
	Wal-Mart Supercenter	Grocery & retail store	N	349
	Georgia Dept. of Human Resources	Public health services	Y	300
	RE Services, LLC	Vending machine operators	N	250
Bledsoe	Southeastern TN Regional Correctional Institution	Prison	Y	321
	Taft Youth Development Center (closing)	Juvenile correctional facility	Y	250
	Fall Creek Falls State Park	State park	Y	150
	Erlanger Bledsoe Community Hospital	Hospital	N	75
	Aviagen Turkeys Ltd.	Poultry hatchery	N	72
Bradley	Cleveland Chair Company, Inc.	Furniture mfg.	N	1,000
	Cleveland Care & Rehabilitation Center	Nursing home	N	900
	Bradley Memorial Hospital	Hospital	N	850
	The Proctor & Gamble Company	Battery mfg.	N	800
	Mars, Inc.	Candy mfg.	N	678
Grundy	Basham Industries	Clothing mfg.	N	100
	Tullahoma Industries, LLC	Clothing mfg.	N	90
	Toyo Seat USA	Office furniture & equipment mfg.	N	75
	The Smokehouse, Inc.	Restaurant & hotel	N	69
	Grundy County School District - Superintendent's Office	K-12 education	Y	55
Hamilton	Blue Cross Blue Shield of Tennessee	Insurance	N	4,337
	Erlanger Medical Center	Hospital	Y	4,000
	Tennessee Valley Authority	Electric power generation	Y	3,000
	Kenco Logistic Services, Inc.	Warehousing	N	2,500
	Republic Parking System, Inc.	Parking lot & garage mgmt.	N	2,000
McMinn	Calhoun Newsprint Company	Paper co. loading dock	N	900
	Denso Manufacturing	Automobile parts mfg.	N	890
	Resolute Forest Products	Paper mill	N	700
	Johnson Controls Interiors, LLC	Automobile parts mfg.	N	675
	Mayfield Dairy Farms, LLC	Milk production	N	525
Marion	Rock-Tenn Company	Paper/cardboard mfg.	N	226
	Wal-Mart Supercenter	Grocery & retail store	N	195
	Variform, Inc.	Plastics mfg.	N	192
	Lowe's Home Improvement	Hardware store	N	150
	Grandview Medical Center	Hospital	N	143
Meigs	Shaw Industries Group, Inc.	Textile mfg.	N	322
	Storm Manufacturing Group, Inc.	Electrical component mfg.	N	139
	Brookewood Nursing Center	Nursing home	N	75
	Solomon Corporation	Power transformer mfg.	N	74
	Meigs South Elementary Schools	K-12 education	Y	72
Polk	Life Care Center of Ducktown	Nursing home	N	130
	Copper Basin Medical Center	Hospital	N	110
	Polk County Government	Government administration	Y	100
	Ocoee Outdoors, Inc.	Outdoor recreation	N	60
	Angiosystems, Inc.	Medical supplies mfg.	N	58
Rhea	Watts Bar II (Tennessee Valley Authority) - Thru 2015	Nuclear power plant construction	N	2,600
	La-Z-Boy Incorporated	Furniture mfg.	N	1,400
	Watts Bar I (Tennessee Valley Authority)	Nuclear power generation	Y	795
	Goodman Manufacturing	HVAC equipment mfg.	N	737
	Suburban Manufacturing Company	HVAC equipment mfg.	N	400
Sequatchie	Wal-Mart Supercenter	Grocery & retail store	N	230
	Southeast Tennessee Human Resources Agency (SETHRA)	Special government unit	Y	225
	C&D Technologies, Inc.	Electrical products mfg.	N	175
	Sequatchie County Government	Government administration	Y	150
	National HealthCare Corporation - Dunlap Center	Health care	N	120

Source: Southeast Industrial Development Association; Hoover's 2012 business employment data

Taxation

The following table presents tax information for counties in the CEDS region in addition to other cities across the South. This information may be helpful for communities and businesses desiring to compare the tax climates of theirs versus other municipalities.

Table 12. Tax Measures for CEDS Counties vs. Other Southern Cities: 2012

		State Income Tax Rates		Sales Tax Rates			2010 Home Property Taxes	
		Individual*	Corporate*	State	Local	Total	Median Paid	% of Median HH Income
CEDS Counties	Catoosa	6.00	6.00	4.00	3.00	7.00	\$ 871	1.87%
	Dade	6.00	6.00	4.00	3.00	7.00	\$ 592	1.49%
	Walker	6.00	6.00	4.00	3.00	7.00	\$ 767	1.80%
	Bledsoe	0.00	6.50	7.00	2.25	9.25	\$ 424	1.43%
	Bradley	0.00	6.50	7.00	2.75	9.75	\$ 760	1.67%
	Grundy	0.00	6.50	7.00	2.25	9.25	\$ 405	1.53%
	Hamilton	0.00	6.50	7.00	2.25	9.25	\$ 1,341	2.30%
	McMinn	0.00	6.50	7.00	2.00	9.00	\$ 524	1.41%
	Marion	0.00	6.50	7.00	2.75	9.75	\$ 502	1.29%
	Meigs	0.00	6.50	7.00	2.00	9.00	\$ 506	1.51%
	Polk	0.00	6.50	7.00	2.25	9.25	\$ 587	1.73%
	Rhea	0.00	6.50	7.00	2.75	9.75	\$ 494	1.34%
	Sequatchie	0.00	6.50	7.00	2.25	9.25	\$ 605	1.79%
Comparison Areas	Birmingham, AL	5.00	6.50	4.00	6.00	10.00	\$ 861	1.52%
	Huntsville, AL	5.00	6.50	4.00	4.00	8.00	\$ 718	1.01%
	Montgomery, AL	5.00	6.50	4.00	6.00	10.00	\$ 462	0.78%
	Little Rock, AR	7.00	6.50	6.00	2.50	8.50	\$ 1,019	1.64%
	Jacksonville, FL	0.00	5.50	6.00	1.00	7.00	\$ 1,527	2.63%
	Atlanta, GA	6.00	6.00	4.00	4.00	8.00	\$ 2,807	3.47%
	Macon, GA	6.00	6.00	4.00	3.00	7.00	\$ 1,263	2.21%
	Lexington, KY	6.00	6.00	6.00	0.00	6.00	\$ 1,461	2.17%
	Louisville, KY	6.00	6.00	6.00	0.00	6.00	\$ 1,353	2.25%
	New Orleans, LA	6.00	8.00	4.00	5.00	9.00	\$ 1,123	2.03%
	Jackson, MS	5.00	5.00	7.00	0.00	7.00	\$ 905	1.86%
	Asheville, NC	7.75	6.90	4.75	2.25	7.00	\$ 1,264	2.47%
	Charlotte, NC	7.75	6.90	4.75	2.50	7.25	\$ 1,648	2.88%
	Greensboro, NC	7.75	6.90	4.75	2.00	6.75	\$ 1,977	2.85%
	Columbia, SC	7.00	5.00	6.00	1.00	7.00	\$ 1,087	1.77%
	Greenville, SC	7.00	5.00	6.00	0.00	6.00	\$ 967	1.68%
	Spartanburg, SC	7.00	5.00	6.00	0.00	6.00	\$ 766	1.48%
	Knoxville, TN	0.00	6.50	7.00	2.25	9.25	\$ 1,076	1.89%
	Nashville, TN	0.00	6.50	7.00	2.25	9.25	\$ 1,595	2.65%
	Houston, TX	0.00	0.00	6.25	2.00	8.25	\$ 3,008	4.35%
	Roanoke, VA	5.75	6.00	4.00	1.00	5.00	\$ 1,915	2.81%
	Charleston, WV	6.50	7.75	6.00	0.00	6.00	\$ 645	1.28%

Source: U.S. Census Bureau, 2010 Decennial Census; Tax Foundation, 2010; SETDD Calculations

* Figures shown represent the maximum tax rate for each respective state; bracket thresholds vary by location.

NOTE: Rates shown were those published in sources available to the SETDD at the time of this CEDS's compilation and have not been verified with jurisdictional revenue departments or property assessors. Residents and businesses may be subject to additional taxes not presented here. Municipalities may also raise or lower their rates from year to year. The SETDD advises that anyone performing research or formulating policy contact local authorities to receive the current rates.

Tennessee is one of nine states in the country that does not levy a tax on individual earnings. The only personal tax is a 6.0 percent rate applied to income from interest and dividends. According to the pro-business group Tax Foundation—a public policy think tank that studies taxation across the United States—Tennessee collects an average of \$27 per capita annually, making it the eighth-lowest state in the country for individual income tax collection.⁹ Businesses, on the other hand, are subject to a corporate tax rate of 6.5 percent. Of all Tennessee’s neighbors, only North Carolina has a higher corporate tax rate.

Georgia residents and businesses are subject to a 6.0 percent tax on personal income. Georgians also pay a 4.0 percent state sales tax on consumer goods, which is lower than Tennessee’s 7.0 percent rate. Once local sales taxes are factored in, CEDS residents in Georgia pay 7.0 percent sales tax while those in Tennessee pay between 9.25 and 9.75. The difference in these rates may result in a phenomenon known as *sales tax drain* where consumers travel across state lines for real or perceived savings, especially when making large purchases. However, Hamilton Place—a shopping hub for the tri-state region—and the urban center of Chattanooga regularly draw consumers from Northwest Georgia and Northeast Alabama. The revenues generated by these regional attractions help off-set sales tax dollars lost to other states.

Hamilton County residents pay the highest percentage of their household income in property taxes compared to other counties in the CEDS region. This proportion is calculated based on statistical median data provided by the U.S. Census Bureau using methodology employed by the aforementioned public policy research institute, Tax Foundation. Given the manner in which mathematic medians are calculated, Hamilton County’s higher percentage is the likely combination of higher home prices in urban areas combined with a large number of logistics, manufacturing, and warehousing jobs whose salaries are not commensurate with Chattanooga housing costs. Alternately, Hamilton County may simply have millage rates and property taxes higher than any of the surrounding counties. The impact of these higher rates has not been documented, though it is not implausible that some homeowners have chosen to move outside Hamilton County to avoid its property tax burden.

Taxation: Major Findings

- Although they pay higher sales taxes than do residents in most other Southern states, the vast majority of Tennessee residents face zero state income tax liability.
- The 6.5 percent corporate tax rate in Tennessee is greater than or equal to those of all neighboring states except North Carolina. This may influence some companies to bypass the CEDS region in Tennessee in favor of areas with lower corporate tax rates.
- The median dollar amount of property taxes paid by Hamilton County residents is more than double what most homeowners in the rural CEDS region pay. Prospective home buyers may thus opt to reside in more surrounding counties and then commute into Chattanooga—a trend that can burden small local governments, increase region-wide traffic congestion, and degrade the environment.

WORKFORCE DEVELOPMENT

As discussed in previous sections, the Northwest Georgia and Southeast Tennessee region has seen unemployment rates recede at a quicker pace than either state or the country as a whole. Much of the region's economic strength lies in its urban areas; high unemployment rates continue to persist in its rural communities. Poverty, meanwhile, is more prevalent throughout the CEDS region than it is nationally, with rates higher than what they have been in a half-century. For the economy to rebound in a manner that enhances the standing of both urban and rural CEDS residents, existing companies must expand and new companies must move into the region.

Political entities can offer tax breaks and a multitude of other incentives in attempts to lure businesses to an area, but a company's ultimate decision ultimately rests upon the answer to one elementary question: can the local workforce fulfill the operational needs of the business? This section discusses the ability of the Northwest Georgia/Southeast Tennessee region to answer this question. It also assesses needs of existing and prospective businesses and identifies strategies that will prepare the region's workforce—particularly in rural areas—to become a nationally competitive labor-shed. In the end, it is only with a prepared, trained workforce that the region will realize its economic growth potential.

Education

The foundational skill sets necessary for specialized technical training in later years are acquired beginning at an early age. It is thus practical to begin this workforce analysis with an examination of the region's school systems. *Table 13* shows current enrollment statistics for the CEDS region.

Table 13. Regional Education Enrollment: 2000-2010

	Nursery/ Preschool		K-8		9-12		College/ Graduate School		Total Enrollment		Percent Increase
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	
GEORGIA	176,842	181,616	1,130,136	1,262,487	468,155	554,519	436,555	735,870	2,211,688	2,734,492	23.6%
Catoosa	958	1,177	7,242	8,172	2,798	3,662	2,014	3,045	13,012	16,056	23.4%
Dade	246	269	1,886	1,759	812	961	1,047	1,499	3,991	4,488	12.5%
Walker	909	937	7,761	8,692	3,245	3,536	1,683	2,385	13,598	15,550	14.4%
GA SUBTOTAL	2,113	2,383	16,889	18,623	6,855	8,159	4,744	6,929	30,601	36,094	18.0%
TENNESSEE	90,016	85,588	728,315	748,232	309,224	343,416	287,550	420,955	1,415,105	1,598,191	12.9%
Bledsoe	165	358	1,545	1,286	633	852	228	508	2,571	3,004	16.8%
Bradley	1,238	2,319	10,770	10,271	4,427	4,768	5,736	7,429	22,171	24,787	11.8%
Grundy	142	317	1,810	1,556	844	730	244	392	3,040	2,995	-1.5%
Hamilton	5,553	8,149	37,735	31,613	15,456	16,632	18,563	22,864	77,307	79,258	2.5%
McMinn	594	1,330	6,127	5,442	2,460	2,782	1,433	1,786	10,614	11,340	6.8%
Marion	251	674	3,618	2,840	1,493	1,515	763	1,124	6,125	6,153	0.5%
Meigs	95	221	1,417	1,301	600	446	223	416	2,335	2,384	2.1%
Polk	208	408	1,825	1,766	752	900	304	575	3,089	3,649	18.1%
Rhea	358	804	3,530	3,398	1,493	1,773	1,202	1,331	6,583	7,306	11.0%
Sequatchie	163	293	1,407	1,532	536	745	316	724	2,422	3,294	36.0%
TN SUBTOTAL	8,767	14,873	69,784	61,005	28,694	31,143	29,012	37,149	136,257	144,170	5.8%
REGION TOTAL	10,880	17,256	86,673	79,628	35,549	39,302	33,756	44,078	166,858	180,264	8.0%

Source: U.S. Census Bureau, 2000-2010 Decennial Census; SETDD Calculations

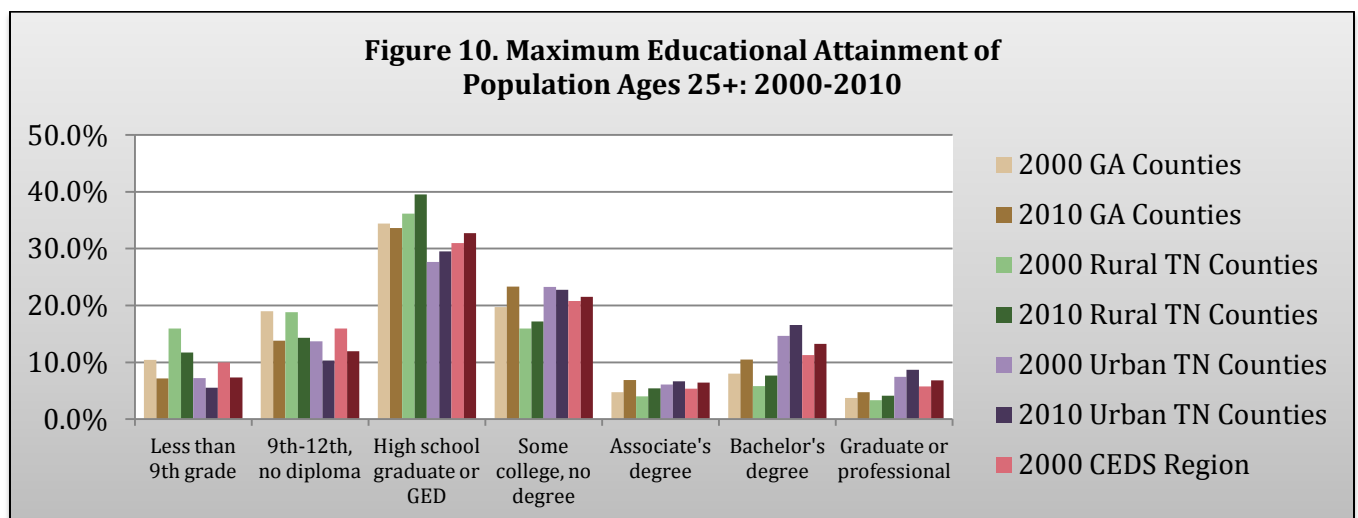
Region-wide, the number of students in every education group except K-8 rose from 2000 to 2010. However, unless there is an increase in the birth rate or in the number of young families immigrating to the region, the population pyramid in *Figure 3* indicates that it is possible enrollment will *decrease* over the next decade. Should such a trend occur, it will become apparent in pre-Kindergarten through 8th-grade enrollment data by the time of the 2020 Census.

Table 14. Maximum Education Attainment of Population Ages 25+: 2000-2010

	Less than 9th Grade		9th-12th, No Diploma		High School Graduate or GED		Some College, No Degree		Associate's Degree		Bachelor's Degree		Graduate or Professional	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
GEORGIA	7.6%	5.8%	13.8%	9.9%	28.7%	29.3%	20.4%	21.0%	5.2%	6.8%	16.0%	17.5%	8.3%	9.8%
Catoosa	7.6%	6.2%	16.4%	11.8%	34.8%	31.5%	21.9%	24.9%	5.5%	8.3%	9.6%	12.2%	4.2%	5.2%
Dade	12.6%	6.6%	20.4%	14.3%	30.4%	34.1%	20.1%	22.8%	5.7%	5.4%	7.5%	11.6%	3.4%	5.2%
Walker	12.3%	8.2%	20.9%	15.5%	35.0%	35.5%	17.7%	22.0%	3.9%	5.9%	6.8%	8.7%	3.4%	4.2%
GA SUBTOTAL	10.4%	7.2%	19.0%	13.8%	34.4%	33.6%	19.7%	23.3%	4.8%	6.9%	8.0%	10.5%	3.7%	4.7%
TENNESSEE	9.6%	6.2%	14.5%	10.1%	31.6%	33.5%	20.0%	20.8%	4.7%	6.2%	12.8%	14.6%	6.8%	8.5%
Bledsoe	16.9%	12.0%	17.0%	16.5%	41.1%	43.0%	14.7%	16.5%	3.0%	3.3%	5.0%	4.9%	2.1%	3.9%
Bradley	11.6%	8.3%	15.1%	11.7%	29.3%	32.0%	22.4%	22.6%	5.7%	6.2%	10.5%	11.7%	5.4%	7.5%
Grundy	24.6%	20.2%	20.3%	15.4%	35.5%	41.3%	10.8%	11.4%	1.8%	3.6%	4.5%	4.9%	2.6%	3.1%
Hamilton	6.0%	4.7%	13.3%	9.9%	27.2%	28.8%	23.5%	22.8%	6.2%	6.8%	15.8%	18.0%	8.0%	9.0%
McMinn	13.5%	9.4%	17.2%	12.3%	36.1%	40.8%	17.7%	17.6%	4.6%	5.9%	6.8%	9.5%	4.0%	4.4%
Marion	15.4%	12.4%	20.0%	13.9%	34.3%	35.7%	15.9%	19.0%	4.8%	5.7%	5.5%	8.1%	4.0%	5.1%
Meigs	14.9%	10.3%	21.5%	16.7%	36.7%	40.9%	17.4%	18.0%	2.4%	5.1%	5.1%	6.2%	1.8%	2.9%
Polk	20.3%	13.7%	17.5%	15.5%	37.6%	38.4%	13.3%	15.1%	3.9%	7.2%	3.9%	6.5%	3.6%	3.6%
Rhea	14.6%	10.6%	20.1%	15.1%	34.2%	37.3%	17.4%	21.0%	4.6%	4.8%	6.2%	8.0%	2.9%	3.2%
Sequatchie	14.3%	11.3%	19.0%	14.6%	38.5%	42.7%	14.6%	11.5%	3.4%	6.5%	7.4%	7.1%	2.8%	6.3%
TN SUBTOTAL	9.9%	7.4%	15.2%	11.5%	30.2%	32.5%	21.0%	21.1%	5.5%	6.3%	12.0%	13.9%	6.2%	7.3%
REGION TOTAL	10.0%	7.3%	15.9%	12.0%	31.0%	32.8%	20.8%	21.5%	5.3%	6.4%	11.2%	13.2%	5.7%	6.8%

Source: U.S. Census Bureau, 2010 Decennial Census; SETDD Calculations

Table 14 provides the educational attainment levels of the region's eligible workforce. As the above statistics document and the figure below illustrates, the population throughout the region has become more educated over the past decade. Fewer students are dropping out of school and more are going to college. The largest category remains that portion of the population with a high school diploma or GED. Workforces in urban areas tend to be better-educated. In Hamilton County in 2010, one-third (33.8 percent) of the 25+ population had at least a two-year college degree; this is near the 35.7 national rate. However, regional CEDS attainment of a college degree is just 26.4 percent, well below the national average.



Source: U.S. Census Bureau, 2000-2010 Decennial Census; SETDD Calculations

While rising education achievement levels should be regarded as an improvement—and they are indeed encouraging markers of progress—educational institutions in the CEDS region must ensure the content of their curriculums is preparing students for realizable careers given this region's

economic niche. Workforce Development staff at the Southeast Tennessee Development District work closely with regional employers and have identified the STEM fields of study—science, technology, engineering, and mathematics—as essential qualifications for graduates today. But as demand for STEM professionals in the workplace has risen, the number of STEM workers in the local and national labor force has declined. Job growth in STEM fields is projected to increase at a rate that outpaces non-STEM fields.¹⁰ It is therefore advantageous for the CEDS region to expand STEM education and training programs.

Several magnet schools in Hamilton County already offer more rigorous math and science courses than those offered at traditional public schools. In addition, beginning this 2012-2013 school year, the new Hamilton County STEM High School will teach its inaugural class of specially selected students a curriculum focused on the four STEM topics, plus the Arts and Medicine (together, “STEAM²”). According to the website for the school, which is located in a new facility on the campus of Chattanooga State, educators will pursue “innovative practices in STEM education and incubate a curriculum and partnership program which can be implemented in schools throughout the region.”¹¹ Multiple community and nonprofit groups as well as private businesses from throughout the CEDS region have invested in STEM High School and agreed to host field trips, conduct in-class exercises, and even offer on-site internships for students. The SETDD encourages the expansion of programs developed at this STEM incubator to schools throughout the region, including rural districts.

Industry-education partnerships like those at STEM High School can be found in institutions of higher learning as well. In recent years, several major CEDS-region employers have partnered with local colleges to create specialized programs and prepare workers for jobs at those companies. One of the region’s newest and largest employers, Volkswagen, has partnered with the University of Tennessee at Chattanooga as well as Chattanooga State to establish the VW Academy, a training program for its new employees. In March 2012, VW announced it was expanding its education offerings and was even looking to start an MBA program at its Chattanooga plant beginning in the fall of 2012.¹² Wacker, a recently arrived photovoltaics manufacturer in Bradley County, has partnered with Chattanooga State as well as Bradley County and Walker Valley High Schools to establish the Wacker Institute. As with the VW Academy, the Wacker Institute provides technical training for its new employees. Cleveland State is looking to initiate similar partnerships with leaders in the transportation and health care industries.

As is evident with the STEM curricula and new industry-education partnerships, the quality and content of local educational programs is becoming more targeted to meet workforce demands in the CEDS region. The SETDD and Tennessee Department of Economic and Community Development have been instrumental in coordinating these education programs. Southeast Tennessee’s Regional Strategic Plan, published in December 2011, recognizes the importance of such public-private partnerships for workforce development and stresses their utility as a recruiting tool for attracting new employers.

The SETDD’s Workforce Development staff have identified *access* as an additional priority: the populations of communities throughout the Southeast Tennessee/Northwest Georgia region can only benefit from workforce development programs if they are able to attend the sessions. College campuses are often used as training sites. Currently, there are 12 private colleges, 1 public college, 6 technical colleges, and 2 community colleges in the CEDS region.¹³ Sewanee University (Franklin County) and Dalton State College (Whitfield County) are additional institutions that lie just outside the CEDS region. The largest concentration of schools is in Chattanooga; Catoosa, Marion, Grundy, Sequatchie, Bledsoe, Meigs, and Polk Counties contain no institutions of higher learning, though

Marion County has taken steps to establish a new four-year institution along U.S. Highway 72 between Jasper and Kimball.

In areas where it is not feasible for colleges to be located, training sessions hosted at churches, K-12 schools, libraries, and community centers are an effective alternative. Interpersonal communication and job interview workshops can improve human interaction skills, while computer, technology, and science courses taught in conjunction with industry professionals can help place workers on a career path. High adult illiteracy rates have discouraged businesses from locating to some rural communities in the past; GED and other programs to build fundamental reading and math skills must be accessible to rural residents in their local communities.

Education: Major Findings

- Educational attainment levels throughout the CEDS region have increased. Fewer students are dropping out of school and more are going to college.
- Workforce analysts and major regional employers have indicated that proficiency in science, technology, engineering, and mathematics is essential for individuals seeking a career at one of Southeast Tennessee's advanced manufacturing centers. The SETDD supports existing STEM programs and encourages their expansion throughout the region.
- Industry-education partnerships provide streamlined technical training that often results in rapid advancement opportunities. They are also beneficial because they help educators identify the most urgent economic needs of a region. The actualized benefits for employers and employees from industry-education pairings thus far invite the establishment of further such programs.
- Training and workforce development initiatives should be made accessible to residents throughout the CEDS region, including those in rural communities.

Tri-State Regional Workforce Alliance

Established in 2006, the Tri-State Regional Workforce Alliance brings together workforce and economic development entities from northeast Alabama, northwest Georgia, and Southeast Tennessee with the stated mission of “advanc[ing] economic and workforce development viability and sustainability by collaborating to meet the current and future talent needs of the Tri-State Region.”¹⁴ In focus groups and surveys administered by the Alliance, employers have proposed the following recommendations to enhance the skill sets of the local labor force:

- Increase student performance standards at all education levels
- Address institutional preferentialism for college prep over career readiness programs for high school students
- Restructure school curriculums to be compatible with workplace demands—the STEM investments noted in the *Education* section are making progress in this area, but similar shifts must occur for programs at the college level
- Offer training programs for people of all ages that enhance technical, computer, and communication skills
- Promote industry-education partnerships such as the VW and Wacker programs

A compliment shared across many responses was the flexibility and willingness of many local community colleges to amend their curricula and adapt to meet industry demands. Four-year

universities, though praised by businesses across the tri-state region for their offering of advanced degree programs, were criticized for low graduation standards and lack of workplace-readiness training. Internship requirements, industry-education partnerships, and preparatory programs to help students transition into the “real/business” world were suggested as improvements.

The Tri-State Alliance also conducted an in-depth sector-level analysis of the economies in its seventeen-county footprint. The report, published in 2010, relies on 2009 data and is somewhat dated. Nevertheless, it reinforces the findings of this CEDS’ own NAICS analysis, which utilizes 2011 industry data, and confirms the dominance of the Transportation and Warehousing and the Manufacturing sectors in the region.

One particular industry reveals its prominence in the Tri-State analysis, especially once the counties just outside the CEDS region in Northeast Alabama and Northwest Georgia are examined: textiles. Dalton, Georgia, for example, is a textile manufacturing hub located just thirty miles from Chattanooga in Whitfield County and is known as the “Carpet Capital of the World.” Unfortunately, in the twelve-month period from June 2011 to June 2012, closures of several mills and cutbacks at others resulted in more than 4,600 jobs lost in the town of 33,000. According to an NPR report, this makes Dalton the town with the past year’s worst job loss in the United States.¹⁵ Dalton residents who have lost their jobs—and others in surrounding communities—may look inside the thirteen-county CEDS region for new employment and workforce training opportunities. The SETDD recommends implementing the strategies in this CEDS in order to catalyze economic recovery across the entire tri-state region.

Tri-State Regional Workforce Alliance: Major Findings

- The SETDD recommends continued collaboration between business representatives, planners, and economic development teams across the region. Priority should be given to identifying employer needs and developing strategies that will strengthen and train the region’s workforce.
- Once the economy improves, the Alliance should reconvene to revise and update its 2010 findings. This will be necessary in order for planners and regional economic development departments to fully understand the changes that have transformed the region’s economy during the recession and ensuing recovery.
- When possible, implementation of this CEDS should accommodate communities outside its jurisdictional boundaries. As the region’s largest urban center, Chattanooga will be the anchor for many new businesses moving into the area. Populations across the seventeen-county tri-state region (and beyond) will increasingly look within CEDS region for new employment and training opportunities.

Career Centers

Career Centers operated by the Tennessee Department of Labor and Workforce Development help job-seekers identify opportunities that match their interests and skill sets. They also organize job fairs, provide career guidance, and host training workshops. One-Stop Career Centers in Athens and Chattanooga have resource rooms with computers, phones, copy machines, and other supplies for job-seekers to build their resumes and conduct job searches.

Access to jobs and training opportunities was highlighted as an issue by the Local Workforce Investment Area Five (LWIA~5) in its most recent 5-Year Strategic Plan.¹⁶ In addition, the tumultuous economy, high unemployment, and emergence of new industry sectors have increased

the number of clients seeking Career Center services. The SETDD oversees LWIA~5's staff and operations and is constantly seeking funding sources and partnerships that will enable Career Center services to serve greater segments of population throughout the CEDS region.

Career Centers: Major Findings

- Due to the dislocation of workers and the limited resources available in rural areas, access to Career Center services is sometimes limited. The SETDD is actively seeking new resources and partnerships to expand services throughout the LWIA~5 and CEDS region.

TRANSPORTATION

The importance of transportation in the CEDS region cannot be overstated, for it is the circulation of goods and people that drives the local economy and connects the region to the South—and indeed the world. This section examines vital regional linkages and how they can be improved.

Regional Connectivity

The confluence of multiple highway, river, and rail networks makes the CEDS area a hub for regional commerce. *Figure 11* below illustrates how these infrastructure linkages help connect CEDS manufacturers, warehousing and logistics operations, tourism trades, and other essential commercial enterprises to the rest of the United States. The interstate highway system places Chattanooga within a 2.5-hour drive of Nashville (135 miles), Knoxville (110 miles), Birmingham (150 miles), and Atlanta (120 miles). Rail lines connect the CEDS region to ports along the Eastern Seaboard as well as to other major rail hubs across the country.

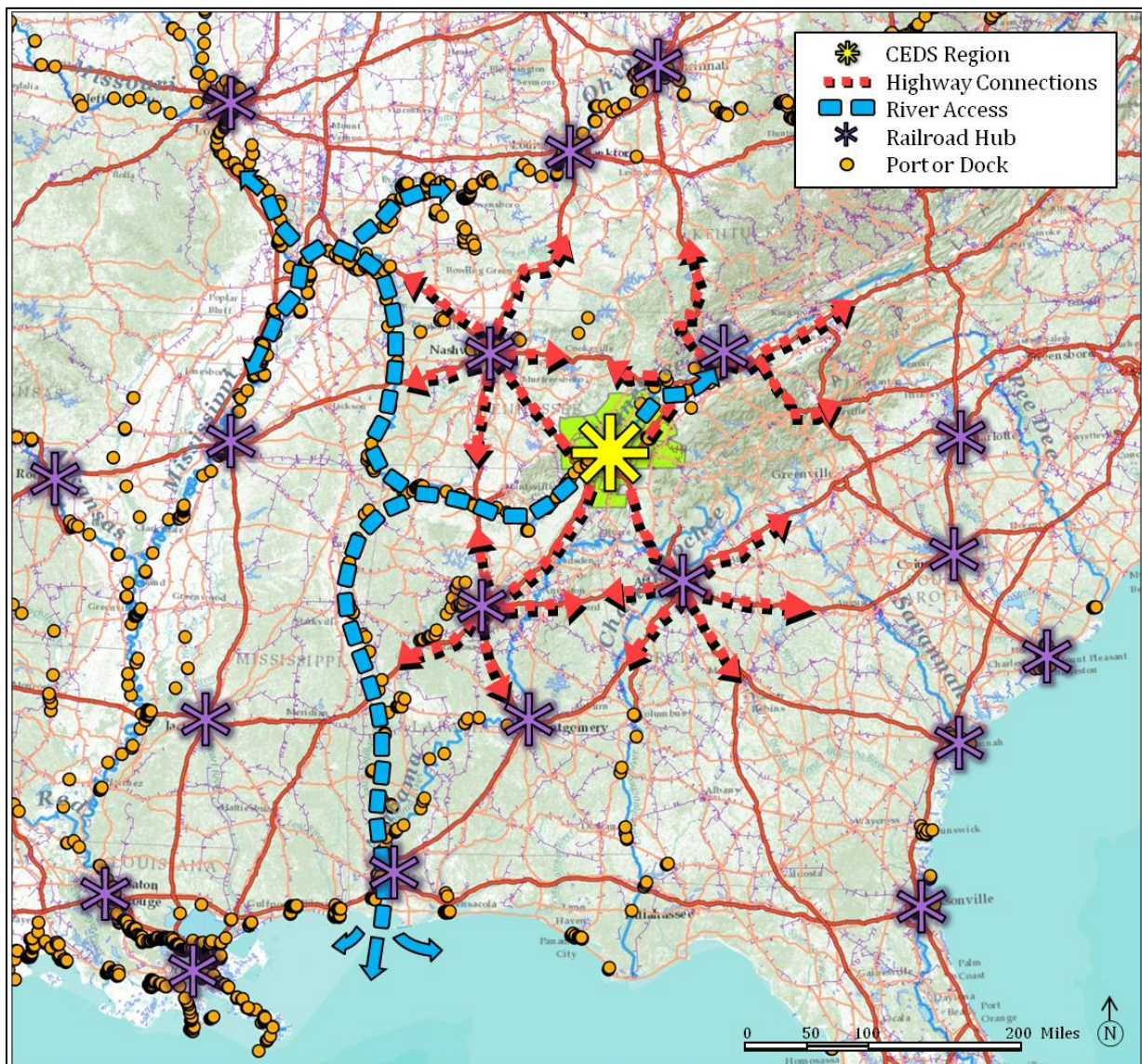


Figure 11. CEDS Regional Infrastructure Connections

Source: Federal Highways Administration, U.S. Army Corps of Engineers, ESRI, SETDD

More than 40 commercial docks along the Hiwassee and Tennessee Rivers provide linkages to the Ohio and Mississippi Rivers and, via the Tombigbee Waterway, the Gulf of Mexico. Major commodities shipped into and out of the CEDS region include coal, lignite, and coal coke; petroleum products; lumber and paper products; iron, steel, rock, sand, and other metal ores and minerals; food and farm products; chemicals; and fertilizers.¹⁷ Shipping these goods in barges along the Tennessee River is less expensive than transporting them by truck or rail. Although savings vary from year to year according to the type and quantity of goods, the Tennessee Valley Authority estimates that barge shipments along the entire Tennessee River reduce transportation costs by \$550 million annually.¹⁸ Moreover, TVA states that “to compete with water transportation, railroads need to keep rates low, creating roughly another \$500 million in savings for those who ship by rail or other alternatives to the river.”¹⁹

Corridor K – As *Figure 11* illustrates, the easternmost CEDS counties, northeast Georgia, and western North Carolina lack access to the interstate system. The current alignments of U.S. Routes 64 and 74 transverse this region and run together from Cleveland, TN, to Murphy, NC, where they split: U.S. 64 eventually meanders towards Interstate 26 in Hendersonville, NC; U.S. 74 joins and follows Interstate 40 to Asheville, NC. However, both of these highways frequently reduce to two lanes, have steep inclines and sharp curves, travel through small towns and tourist areas with high pedestrian traffic, and are subject to abrupt variations in the speed limit. Falling rocks and landslides have resulted in extended road closures—in 2009, a rockslide shut down Highway 64 through the Ocoee Gorge for months—while limited sight distances and other road hazards contribute to higher-than-average incidence of vehicle crashes, even in good weather conditions.²⁰

First recommended as an economic development initiative by the Appalachian Regional Commission in 1965, Corridor K is a highly anticipated, exceedingly studied transportation solution that proposes improving existing facilities and, along some segments, constructing an entirely new route to connect Asheville and Chattanooga. Despite widespread local support, inconsistent funding commitments and a multitude of environmental hurdles have thus far relegated Corridor K to a state of perpetual stasis, its future uncertain. The SETDD, the Rural Planning Organization, and many regional communities, businesses, and interest groups await the economic benefits of Corridor K and look forward to the CEDS region’s strengthened ties to resource-rich Appalachia and western North Carolina.

State Route 30 – In addition to Corridor K, the region’s Rural Planning Organization along with the Chattanooga MPO and the Cleveland MPO have identified TN State Route 30 from McMinnville to U.S. 411 as another high-priority project. The need for this project arises from the northeast-southwest orientation of two major topographic barriers: the Cumberland Plateau and Walden’s Ridge. Historically, the 1,200-foot inclines presented by these geographic features have restricted east-west mobility across the CEDS region; most major roads therefore stick to the valleys. S.R. 30 was designed to facilitate east-west mobility, but it is a narrow, winding road along most of its route, and upgrades are needed to transform it into a viable commercial transportation corridor. The RPO has endorsed improvements along the entire route from McMinnville to U.S. 411. However, except for a \$1 million commitment from TDOT for an environmental study along an 8-mile segment from U.S. 27 to 2,000 feet east of the Tennessee River, no additional funds have been allocated for further feasibility analyses or construction. Local governments along the route have formed the Highway 30 Coalition to promote the project.

Regional Connectivity: Major Findings

- One of the CEDS region's greatest assets is its connections to multiple river, rail, and highway transportation routes. Maintenance of these facilities is essential.
- The nearest truck-to-rail intermodal yard is located in Atlanta. Multiple CEDS businesses would like to see such a facility built in the Southeast Tennessee region.
- Congress recently removed the twenty percent local matching funds requirement to the Appalachian Development Highway System. Eliminating the required TDOT match increases the likelihood of Corridor K being constructed. TDOT is currently analyzing project alternatives and preparing an EIS, forestalling any new advancements until after the final EIS is delivered in 2014. In the meantime, the SETDD will continue to advocate and explore funding options for Corridor K.
- Increased east-west mobility provided by improvements along S.R. 30 from McMinnville to U.S. 411 will result in greater economic investment in the northern CEDS counties. The SETDD joins the RPO in promoting this project and will actively pursue support to bring it to fruition.

Infrastructure Maintenance

The CEDS region's dominant industrial sectors—Manufacturing, and Transportation and Warehousing—are dependent on its transportation facilities. To that end, maintenance of Northwest Georgia and Southeast Tennessee's major roads and bridges is as much of an economic concern as it is one of safety. *Table 15* below shows transportation project funding for Tennessee counties according to TACIR's database of 2009-2014 five-year Capital Improvement Plan projects.

Table 15. Transportation Projects by County: 2009-2014

County	No. of Projects	Total Est. Cost	Percent of Total Cost	Percent of Cost in CIP	Cost Per Capita
Bledsoe	7	\$13,735,482	0.07%	72.8%	\$1,059
Bradley	61	\$207,735,063	1.1%	8.44%	\$2,126
Grundy	22	\$18,279,169	0.1%	4.38%	\$1,294
Hamilton	131	\$929,613,418	4.92%	52.38%	\$2,757
McMinn	37	\$305,710,209	1.62%	26.07%	\$5,797
Marion	20	\$47,412,823	0.25%	0.0%	\$1,689
Meigs	13	\$23,957,000	0.13%	0.0%	\$1,979
Polk	31	\$383,774,684	2.03%	0.04%	\$24,525
Rhea	14	\$62,853,941	0.33%	0.48%	\$1,994
Sequatchie	13	\$21,191,471	0.11%	1.51%	\$1,523

Source: Tennessee Advisory Commission on Intergovernmental Relations, 2011²¹

Most of these costs are tied into road and bridge improvements. A relatively small portion is for sidewalk, bike, and other multimodal facilities. The extreme Cost Per Capita amount for Polk County is attributable to anticipated project costs for Corridor K; however, the ongoing EIS for this project precludes any construction activities until after 2014.

Rural CEDS counties and communities often have difficulty meeting their infrastructure maintenance obligations. As a consequence, the condition of local streets and sidewalks deteriorates, creating safety hazards, increasing personal vehicle maintenance costs, and impeding

local economic development. Furthermore, emergency services may have difficulty reaching accidents or fires where streets have not been constructed or maintained adequately—resulting in longer response times as well as increased homeowner’s insurance premiums. Minimum road construction requirements enforced by planners and road departments can help ensure developers are constructing roads to an acceptable standard. In addition, directing new development to occur in targeted areas where there are existing or planned facilities, rather than allowing it to occur irrespective of existing infrastructure and public services, allows local governments to streamline their capital improvement plans and focus on these target areas, where investments will benefit the most people and businesses. This CEDS thus encourages communities in its jurisdictional counties to manage growth in an intentional way, that is, with respect to existing or planned transportation facilities and public services. Doing so will reduce the maintenance and operational demands otherwise imposed by sprawling, disjointed infrastructure networks.

Infrastructure Maintenance: Major Findings

- Maintenance of roads and bridges is essential for major CEDS industries to conduct their operations safely and efficiently; these facilities are thus the top priority. Investments in sidewalks and multimodal facilities are also important because they reduce air pollution, improve a community’s quality of life, and enable less expensive modes of transit. Multimodal investments also contribute to a community’s brand image and can be an effective marketing tool to attract eco-conscious companies to the region.
- Adoption and enforcement of road standards and development controls is recommended in order to help rural communities rein in their finances and place them on a path to long-term environmental, economic, and financial stability.

Commuting Patterns

A look at commuting data shows that personal vehicles are the primary means of transportation for people traveling to work in the CEDS region. Three-fourths of all workers drive alone to work. Nearly 10 percent carpool—a figure that includes roommates and spouses who drive together.

Table 16. Method of Transit and Mean Travel Time for Commuters: 2010

	Drive Alone	Carpool	Public Transit	Work at Home	Mean Travel Time (Minutes)
Catoosa County	86.5%	9.6%	0.4%	2.5%	22.8
Dade County	79.3%	10.3%	0.8%	6.4%	27.4
Walker County	82.1%	13.2%	0.3%	2.7%	25.7
Bledsoe County	69.4%	11.5%	0.0%	2.8%	33.3
Bradley County	75.4%	7.8%	0.1%	3.0%	20.4
Grundy County	68.0%	11.4%	0.3%	7.9%	25.5
Hamilton County	73.9%	9.1%	0.8%	2.5%	21.2
McMinn County	74.1%	8.4%	0.2%	3.2%	22.0
Marion County	73.3%	10.7%	0.1%	3.1%	27.4
Meigs County	61.1%	12.0%	0.3%	1.1%	29.4
Polk County	65.7%	12.6%	0.1%	4.9%	30.0
Rhea County	67.4%	10.5%	0.0%	3.9%	25.8
Sequatchie County	71.5%	9.9%	0.0%	2.6%	28.4
REGION AVERAGE	75.1%	9.5%	0.5%	2.9%	22.8

Source: U.S. Census Bureau, 2010 Decennial Census

The counties in *Figure 12* below have been shaded to spatially convey the mean travel times shown in *Table 16*. Residents in counties along the I-75 Corridor enjoy the shortest average commute times, while the typical Bledsoe or Polk County resident faces a commute that is a half-hour or longer. These long travel distances result in more money spent for gas, maintenance, and vehicle repair. The benefits of higher-paying jobs located farther away may be off-set by increased transportation costs. Those without personal automobiles may become socially isolated and also face significant hurdles getting to work or school, buying groceries, accessing medical care, attending workforce training workshops, and fulfilling basic civic responsibilities such as voting.

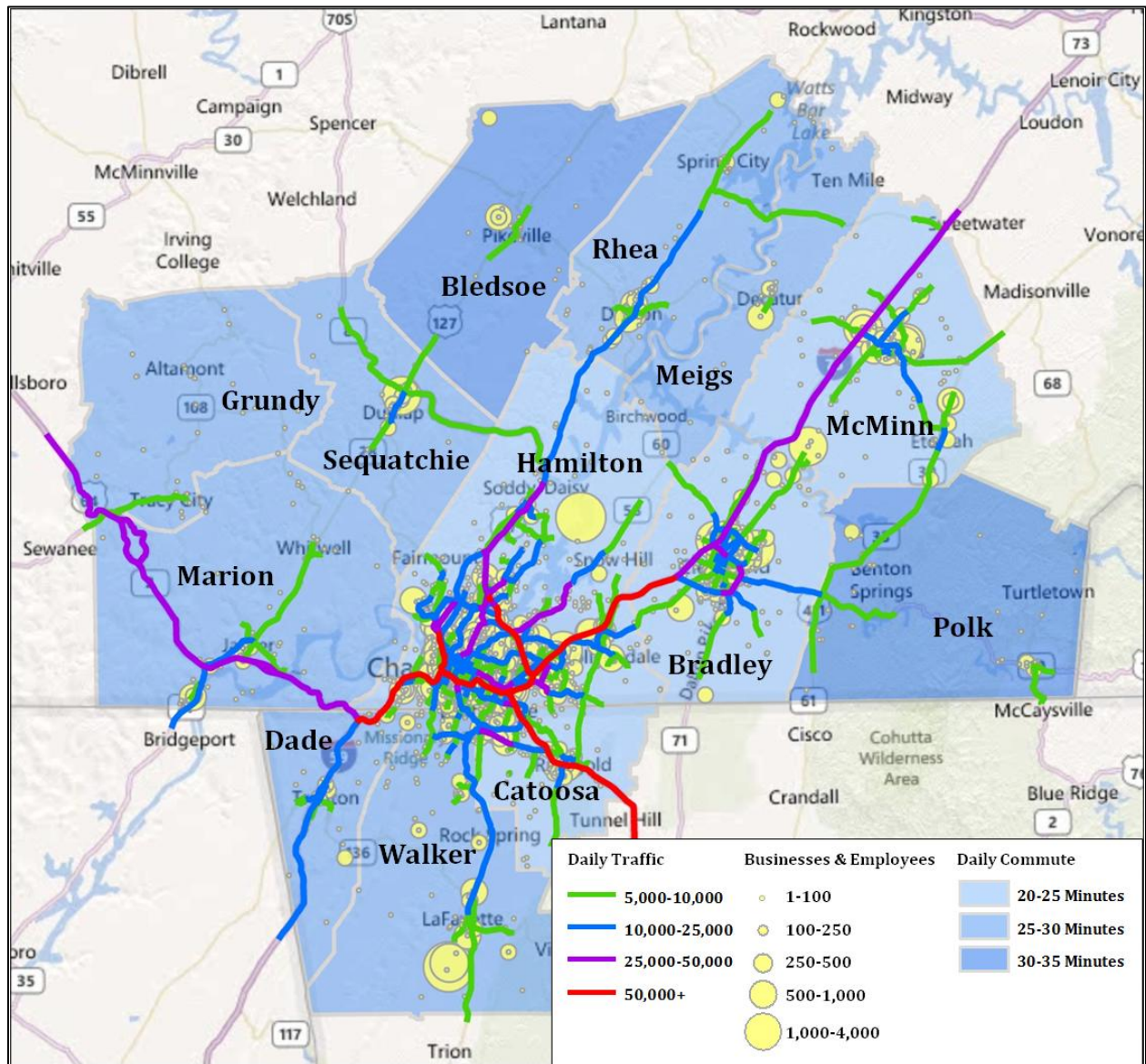


Figure 12. High-Traffic Roads and Employment Destinations in CEDS Region

Sources: U.S. Census Bureau, 2010 Decennial Census; Georgia Dept. of Transportation; Tennessee Dept. of Transportation; Hoover's 2012 business employment data

The greatest concentration of businesses in both size and number is around Cleveland and Chattanooga, followed by Athens, Dayton, LaFayette and Ringgold. Unsurprisingly, these employment centers are located along transportation corridors with high traffic volumes. Due to

employee commutes and commercial activities, businesses are themselves substantial generators of traffic. Very few roads in Grundy, Bledsoe, Meigs, and Polk Counties have roads with daily traffic counts over 5,000; the number of large employers in these low-traffic counties is similarly lacking.

The traffic, employment, and commuting patterns reinforce what is already known about the CEDS economy: access to businesses and jobs is extremely limited across large extents of the region, forcing workers and consumers to travel long distances along a small subset of roads in order to reach their destinations. While this arrangement is not necessarily unique to the CEDS region, it does reinforce the importance of improvements and maintenance to transportation infrastructure.

Commuting Patterns: Major Findings

- The greatest traffic volumes follow the highways and interstates, and are otherwise concentrated in the CEDS's urban areas. Interstate 75 between Chattanooga and Atlanta experiences daily traffic counts over 50,000 the entire way. Of all the interstates that connect Atlanta to other major cities, only I-75 between Macon and Atlanta matches this volume of traffic—a testament to I-75 and the economic benefits the CEDS region enjoys because of its proximity to this corridor.
- There are few major employment centers in the rural CEDS counties. Residents in Polk and Bledsoe Counties spend more than a half-hour driving to work every morning and afternoon. This CEDS aims to introduce new economic opportunities in rural areas that will provide new jobs and reduce the workforce's time and travel costs.

Public Transportation

As *Table 16* in the previous section illustrates, less than one percent of workers in the CEDS region utilize public transportation in their daily commutes. Traditionally, public transit has only been feasible in urban areas with dense populations. Because this CEDS analysis covers a large geographic extent with many unincorporated, small, and rural communities, the calculated ridership proportions will be low. In only a single census tract in the entire CEDS region—one with a high concentration of government-subsidized multifamily housing—does more than twenty percent of the population utilize public transportation on their commutes.

Within Hamilton County, the Chattanooga Area Regional Transportation Authority (CARTA) provides bus service for over 3 million passengers annually. The Cleveland Urban Area Transit System (CUATS), operated by the Southeast Tennessee Human Resource Agency (SETHRA), provides public transit within the Cleveland city limits. Otherwise, there are no regular transit routes in any other CEDS communities. The only other public transit option is available through SETHRA, which receives TDOT funding to administer on-call, curb-to-curb shuttle services from its Dunlap headquarters in Sequatchie County.

There are additional programs for the elderly and the disabled that are not available to the general public. CARTA's Care-A-Van is an on-call shuttle service that provides transportation for the disabled. SETHRA, meanwhile, places a priority on providing transportation for the elderly. The Area Agency on Aging of Northwest Georgia—a division of the SETDD's Georgia counterpart, the Northwest Georgia Regional Commission—provides transportation services for the elderly in Catoosa, Dade, and Walker Counties. As discussed at length in the Population section of this CEDS report, the rising bubble of Baby Boomer retirees will place unprecedented strain on these elderly

transportation services. SETHRA requires resources that will allow it to expand its services in rural areas. CARTA and CUATS can accommodate those living in the region's urban areas.

Public Transportation: Major Findings

- The SETDD recognizes the important role of public transportation, especially for low-income members of society. However, regularly scheduled transit systems are only feasible in urban CEDS communities. In this light, the SETDD encourages transportation programs for the region's rural populations and expansions to serve the increasing number of senior citizens in particular.
- Even though CARTA in Chattanooga and CUATS in Cleveland operate largely outside the jurisdiction of this CEDS, the SETDD recommends routes be arranged to maximize mobility and consider the economic interests of both riders and destinations.

Alternative Transportation & Multimodal Enhancements

Communities throughout the CEDS region have made significant infrastructure investments supporting transportation modes that do not rely on fossil fuels. Chattanooga's Bicycle Transit System, pictured right, is a recent such investment. Unrolled in July 2012, the bike-share program allows students, residents, visitors, and tourists downtown to rent bicycles for designated time periods. The bikes allow quick, easy access to local destinations and are an affordable, readily available alternative to—for example—rental cars and taxis for guests who may have flown into town for a convention. This bike-share program combined with bike lanes, trails, storage facilities, and a variety of cycling initiatives and advocacy groups led *Bicycling Magazine* to recognize Chattanooga as the U.S.'s 28th most-bikeable city in 2012.²²



Bicycle Transit System in Chattanooga

Source: <http://www.nooga.com/>

Bike-share programs can be successful in smaller communities as well. They allow tourists to get out of their cars and intimately explore the town—which also encourages them to spend money in local restaurants and businesses. To accommodate bikers, however, many CEDS communities must take steps to become more bike-friendly. A place-making initiative known as *complete streets*, of which bike lanes comprise just one component, encourages community development by making cities and towns attractive to a wide range of travelers. Rather than being solely automobile-oriented, complete streets facilitate mobility of bicycle and pedestrian traffic via bike lanes, sidewalks, and in some cases, multi-use paths. Landscaping is another important element of what makes a street “complete”: trees and pervious buffers improve air quality, provide shade, reduce stormwater runoff, and enhance the aesthetic appeal of communities. The SETDD is unaware of complete street programs existing in any of its jurisdictional communities but supports their incorporation into local zoning and development codes. In terms of implementation, grants to fund bike lane and sidewalk construction are, and will continue to be, a priority of the Development District.

Personal vehicle travel that does not require gasoline is becoming increasingly feasible across the CEDS region. Electric charging stations are currently available to the public in Athens, Chattanooga,

Cleveland, Ducktown, East Ridge, Kimball, Lookout Mountain, Monteagle, Ooltewah, and Rossville. A compressed natural gas (CNG) fueling is available for public fleet vehicles in South Pittsburg, while Volunteer Energy Cooperative is planning to install public CNG stations in Meigs County. Admittedly, these alternative sites are at present widely dispersed, but they form the requisite foundations that will position the CEDS region for clean transportation technologies that will grow and improve over the next century.

Alternative Transportation & Multimodal Enhancements: Major Findings

- Bikeability and walkability are important factors that should be considered when building new streets and improving existing ones. Bike lanes, sidewalks, and other facilities to facilitate a range of multimodal transit alternatives should be a priority for CEDS communities, both large and small. Bike-share programs should be introduced in communities throughout the region, given their health benefits, viability as a low-cost transit alternative, and economic contributions to local businesses.
- Making gasoline-free vehicles powered by energy sources such as compressed natural gas (CNG) and electricity a viable alternative to the internal combustion engines is only possible if the “refueling” infrastructure exists. Because alternative-energy vehicles reduce air pollution as well as the region’s reliance on oil imports, recharging stations and public CNG stations should continue to be installed throughout the region. Local governments and businesses can promote alternative energy sources by converting their fleets to clean energy technologies as existing motor pool vehicles are retired.

Greenways & Trails

Regional greenways and trail networks are valued amenities in local communities and neighborhoods, and are becoming increasingly recognized for their economic benefits. But how can a simple bike trail or greenway impact a community economically? They affect housing markets: the National Association of Homebuilders lists trails as the #1 amenity homeowners seek when buying a home.²³ Homes near greenways are often valued higher and sell faster. Local and regional commercial establishments realize benefits too—when factoring in dollars spent at businesses, in restaurants, for food and drinks purchased at retail establishments, and for transportation expenditures to and from the greenway, a Florida study looking at bike trails in Orange County calculated the average bike-riding tourist spends around \$20 per day.²⁴ A North Carolina DOT study estimated that the department’s \$6.7 million investment in bicycle facilities on the Outer Banks generates annual economic benefits totaling \$60 million.²⁵ This spending in turn generates tax revenues for state and local governments.

According to Trailtowns.org, studies have shown that “the longer a trail is, the farther people will travel to visit it, the longer they will stay, and the more money they will spend.”²⁶ However, to be viable economic investments, greenways must be well-planned and include certain basic amenities. Successful trails may or may not be paved, but they usually feature parking areas, mile markers, way-finding points, emergency call boxes, restrooms, and water fountains for both people and pets. They link and provide access to multiple *destinations* such as restaurants, small businesses and shopping centers, restaurants, landmarks, viewsheds, parks, and natural areas. New technologies such as smartphone applications encourage users to utilize trails and explore communities by providing immediate access to trail maps and information on local attractions and businesses. Smartphone apps can also provide cultural and historical background about local communities and information about other “must-see” points of interest along the way.

National Park Service reports leading as far back as the 1980s have identified Chattanooga along the Tennessee River as an ideal hub for future regional greenway networks. The Riverpark system has arguably realized much of this vision. Yet as *Figure 13* illustrates, only a small handful of greenways currently exist or have been planned in the CEDS region—far fewer in comparison to the counties around Knoxville or Nashville. Bledsoe, Meigs, Rhea, and Sequatchie Counties have no greenways whatsoever, while the vast extents of Grundy, Marion, McMinn, and Polk Counties similarly lack greenways. Unfortunately, no recent spatial data were available for the three CEDS counties in Georgia, hence their omission from this map.

Given the region's pristine natural areas filled with hidden treasures and the abundance of small towns that could benefit economically from greenway-oriented tourism, the SETDD supports the expansion of both local and regional trail networks as a part of this CEDS. In order to effectively facilitate collaboration and coordination for larger, cross-county greenways, regional or perhaps even statewide plans should be in place.²⁷ The Regional Transportation Plan currently under development as well as the *Thrive 2055* initiative can help identify areas that should be prioritized for greenway development.

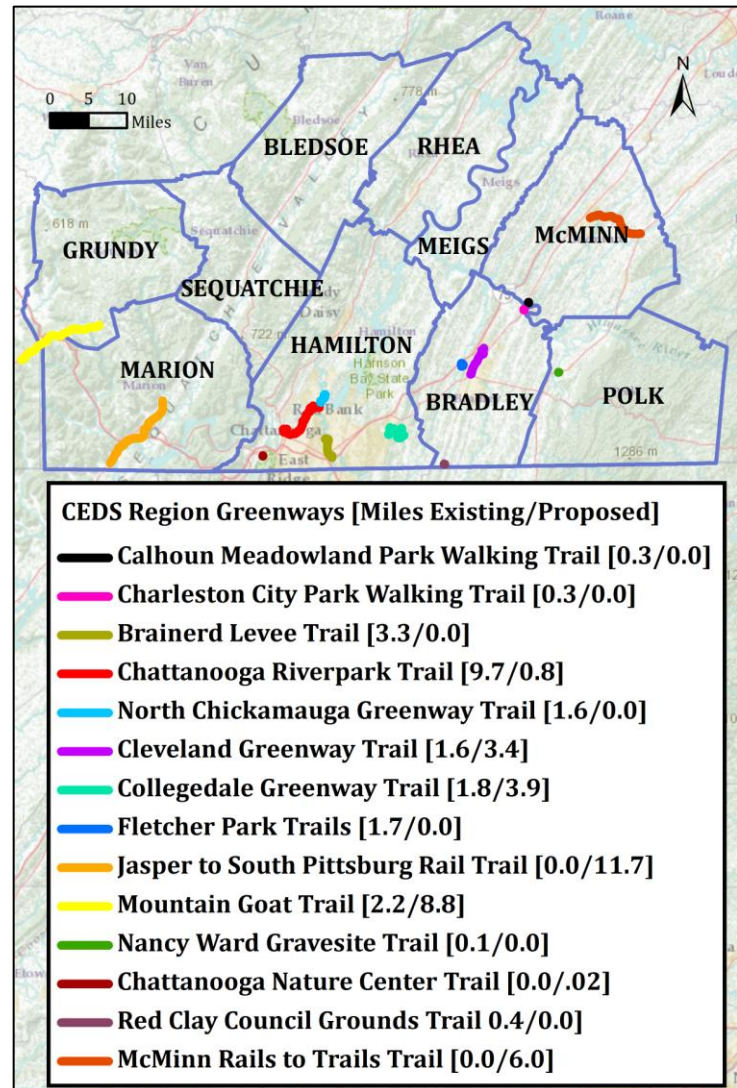


Figure 13. Existing and Proposed Greenways in Southeast Tennessee: 2010

Source: Tennessee Department of Environmental Conservation, Division of Recreation Educational Services, 2010

Greenways & Trails: Major Findings

- Well-planned greenway and trail systems can yield significant economic benefits for local businesses and governments. The SETDD supports building new greenways to accommodate a range of recreational activities, both locally in CEDS communities and regionally across Southeast Tennessee and Northwest Georgia.
- A regional or statewide greenway plan should be developed to help with collaboration and implementation across multiple jurisdictions. The Regional Transportation Plan and Thrive 2055 should incorporate greenways into their analyses. In the meantime, CEDS communities may find it worthwhile to conduct TDEC's "Walk with Me Tennessee" assessments.²⁸

UTILITIES

Water, sewer, and broadband are the utilities most tied to economic development in the CEDS region. This section analyzes the existing utility infrastructure and identifies areas for improvement. It also presents landfill and recycling data, as these facilities require long-range financial and environmental planning to ensure adequate capacity for CEDS residents, businesses, and governments.

Water

Water is one of the most important necessities for economic development. The Tennessee Valley is blessed with abundant water sources, such as the Tennessee and Hiwassee River. Yet this does not mean that everyone has access to a water source: some parts of the region are isolated from water sources by mountainous terrain and other topographic factors.

Political constraints are also a problem with water supply. The State of Tennessee has adopted the Interbasin Water Transfer Act, which effectively prohibits water transfers out of the Tennessee River Valley watershed. This has an impact on the southern section of the region, where water flows toward the Chattahoochee River basin. Aging and inadequate infrastructure is another problem. Regulatory requirements for water plant operations are stringent, resulting in the need for frequent equipment and facility upgrades. As the population increases, additional capacity will be required, and regional treatment plants begin to make more sense as economies of scale come into play.

Currently, there is one regional system operated by the Hiwassee Utility Commission (HUC). This organization provides water to other utilities throughout the Hiwassee Region, including Cleveland, Riceville, Athens, and Niota. Water systems that can access HUC's main lines have a distinct advantage over systems that are isolated because they have an assured backup supply if their local plant or water source fails. HUC has virtually an endless supply of water from the Hiwassee River, which is one of the least-polluted water bodies in Tennessee.

Most of the utilities in the region have the ability to interconnect with other neighboring systems, a long-term goal of the SETDD. These interconnections are important since parts of the region have experienced water shortages due to drought conditions occurring with increasing frequency over the past several years. Linked systems provide backup supplies of water, especially for utilities that are not directly connected to a large water resource like the Tennessee River.

In 2004, the Development District commissioned a study to determine the most appropriate method of supplying water to the west side of the region. Problems with water sources, failed wells, and aging infrastructure have plagued communities such as Monteagle for some time. The study recommended a 6 million gallon-per-day (gpd) plant located on the Tennessee River, which would be capable of providing water to all of the utilities in the Valley as well as those located on the adjacent Cumberland Plateau in Bledsoe, Grundy, and Sequatchie Counties. Some of the most likely methods of implementing study recommendations include forming a utility (similar to HUC) to build a new plant. Another option is to develop an agreement with South Pittsburg to upgrade its plant on the Tennessee River to accommodate all of the needs in this part of the region. A third option would be for an existing system, such as the Tennessee American Water Company, to provide water to the Sequatchie Valley region. *Table 17* on the next page shows the most recent service capacities of water treatment stations in the CEDS's Tennessee counties.

Table 17. Capacity of Southeast Tennessee Water Treatment Plants

County	Utility	Design Capacity (GPD)	Millions GPD Pumped	
			Average	Maximum
Bledsoe	Pikeville Water System	518,400	0.488	0.515
	Taft Youth Center	604,800	0.590	1.718
Bradley	Cleveland Utilities	2,330,000	7.827	8.247
	Hiwassee Utility District	7,499,520	3.620	5.700
Grundy	Big Creek Utility District	1,866,240	0.849	1.115
	Tracy City Water System	799,200	0.440	0.667
Hamilton	Eastside Utility District	N/A	8.156	11.694
	Hixson Utility District	N/A	6.747	8.308
	Mowbray Mtn. Utility District	N/A	0.336	0.421
	Sale Creek Utility District	529,920	0.178	0.323
	Savannah Valley Utility District	2,880,000	1.837	2.026
	Signal Mountain Water System	3,369,600	0.936	2.010
	Soddy-Daisy-Falling Water Utility District	5,971,680	1.905	2.512
	Tenn-American Water Company	64,800,000	39,219.000	53,214.000
	Union Fork-Bakewell Utility District	604,800	0.371	0.561
	Walden's Ridge Utility District	N/A	0.883	1.707
Marion	Foster Falls Utility District	N/A	0.034	0.098
	Griffith Creek Utility District	N/A	0.073	0.110
	Jasper Water System	1,693,440	1.114	1.678
	Monteagle Public Utility Board	1,008,000	0.393	0.685
	Orme Water System	74,880	0.024	0.034
	South Pittsburg Water System	3,359,520	0.998	1.477
	Suck Creek Water System	108,000	0.026	0.058
	Whitwell Water System	1,209,600	0.838	1.088
McMinn	Athens Utility Board	4,147,200	2.142	2.979
	Calhoun-Charleston Utility District	N/A	0.202	0.740
	Englewood Water Department	576,000	0.239	0.429
	Etowah Utilities	5,499,360	2.771	3.545
	Niota Water System	N/A	0.297	0.541
	Riceville Utility District	N/A	0.226	0.460
Meigs	Decatur Water Department	1,008,000	0.618	0.726
Polk	Benton Water System	1,584,000	0.348	1.135
	Copper Basin Board Public Utilities	748,800	0.261	0.402
	Copperhill Water Department	N/A	0.080	0.108
	Hiwassee Water Co-op	N/A	0.126	0.284
	Ocoee Utility District	N/A	1.318	2.384
Rhea	Dayton Water Department	4,032,000	2.650	3.547
	Grandview Utility Department	N/A	0.089	0.157
	Greysville Water Department	432,000	0.158	0.245
	North UD of Rhea County	N/A	0.197	0.430
	Spring City Water System	1,658,880	0.485	0.910
	Watts Bar Utility District	1,152,000	0.702	0.990
Sequatchie	Cagle-Fredonia Utility District	N/A	0.137	0.211
	Dunlap Water System	2,016,000	0.703	1.048
	Lone Oak Utility District	233,280	0.034	0.169

Source: TDEC Division of Water Supply, 2007

In Marion, Grundy, and Sequatchie Counties, there are several interrelated problems occurring that will require a solution in the near future. First, the Town of Jasper's plant on the Sequatchie River is

unable to handle the additional demands that new development has placed on it. Barring another solution, the town is considering spending several million dollars on a new plant to be located on the Tennessee River. Upgrading the existing plant is possible, but flows in the Sequatchie River are not sufficient to meet long-term requirements. The Sequatchie River has a relatively small stream flow that is drawn from by Pikeville as well as Dunlap. Both of these cities also use the stream for wastewater discharges.

On Monteagle Mountain, there are problems with water supplies. This is a water-poor area still suffering from coal mining operations that have long since shut down. The water table is heavily polluted with iron, and there are few reliable sources of surface water. A recent study performed by the Tennessee Department of Environment & Conservation, the *South Cumberland Water Resources Regional Planning Pilot*, recommends increasing the capacity of an existing water impoundment and connecting utilities throughout that part of the region to help mitigate any water shortage that occurs locally. The SETDD is applying for a grant from the Appalachian Regional Commission to draw water from a nearby flooded quarry in emergency situations.

Farther up the Sequatchie Valley, the Town of Whitwell has water storage problems and will also need an upgrade in its water treatment system. A look at *Table 17* on the previous page indicates enough capacity in this part of the region, but this is dependent on reliable water sources and usable infrastructure—two factors that are missing for several of the utility systems.

A water line at the north end of the Sequatchie Valley connects the Dayton water system to Pikeville. New development in this region including a state prison will require water from Pikeville and necessitates the construction of a force main and pump station to the prison site.

Water: Major Findings

- Water resources abound throughout much of the CEDS region but are severely lacking in some areas. Securing funds to maintain existing facilities, build new plants, and construct regional utility connections remains a priority of the SETDD. Progress on this goal will ensure existing demands are met, increase capacity for new growth, and provide water security for drought-prone communities.

Sewer

Sewer service is provided almost exclusively by the region's municipalities. Several of the rural utility districts provide onsite service through the use of decentralized package systems and drip-irrigation. An analysis of each system shows that some form of sewer service is available at each industrial park within the region. However, in many of the parks, the lines have become inadequate due to small line size and increased capacity demands. These lines must be replaced to continue recruiting business and industry to the region.

The plateau portion of the region that encompasses Grundy, Bledsoe, Marion, Sequatchie Counties as well as areas of Hamilton and Rhea County struggles to provide sewer service due to the lack of blue-line streams suitable for wastewater discharge. Several of the sewer systems are at or near capacity, making it difficult to service new industrial and commercial growth. These sewer providers must find new, cost-effective methods to deliver service to their clients.

Table 18. Capacity at CEDS Region Sewer Treatment Facilities: 2011

County	Utility	Capacity (Mil/Day)	Treated Effluent (Mil/Day)	Remaining Capacity	Capacity Used
Catoosa	Catoosa	N/A	N/A	N/A	N/A
Dade	Trenton	1.00	0.25	0.75	25.0%
Walker	LaFayette	3.50	1.90	1.60	54.3%
Bledsoe	Pikeville	0.57	0.12	0.46	19.3%
Bradley	Cleveland	37.00	9.10	27.90	24.6%
Grundy	WWTP	0.10	0.03	0.08	20.0%
	Monteagle 1	0.25	0.14	0.11	56.0%
	Monteagle 2	0.25	0.06	0.19	24.0%
Hamilton	Moccasin Bend	160.00	120.00	40.00	75.0%
	Signal Mountain	1.50	0.23	1.27	15.3%
McMinn	Athens	4.03	3.24	0.79	80.4%
	Englewood	0.25	0.16	0.09	64.0%
	Etowah	2.00	0.73	1.27	36.5%
	Niota	0.40	0.15	0.25	37.5%
Marion	Jasper	0.78	0.30	0.48	38.5%
	South Pittsburg	1.40	0.70	0.70	50.0%
Meigs	Decatur	0.34	0.31	0.03	90.3%
Polk	Benton	0.18	0.04	0.14	21.7%
	Copperhill	0.70	0.30	0.40	42.9%
	Ducktown	0.14	0.05	0.09	35.7%
Rhea	Dayton	2.69	1.30	1.39	48.3%
	Spring City	3.50	1.00	2.50	28.6%
Sequatchie	Dunlap	0.93	0.50	0.43	53.8%

Source: US Environmental Protection Agency; SETDD

Several sewer systems in the CEDS region are under moratoriums, while others experience routine maintenance and operational issues. Mismanagement and a lack of funding have made upgrading these facilities difficult and directly impacted local economic expansion. The following waste water treatment plants have known, ongoing issues:

- Signal Mountain – Moratorium due to infiltration and inflow (I&I) problems
- Jasper – New development first requires WWTP expansion
- Athens – Moratorium due to I&I
- Niota – I&I; voluntary moratorium
- Englewood – I&I; commissioner’s order has mandated system upgrades
- Decatur – Nearing capacity
- Copperhill – Upgrades needed

In July 2012, the U.S. Environmental Protection Agency issued an order requiring the City of Chattanooga to install sewer and WWTP improvements over the next 15 years totaling an estimated \$250 million.²⁹ Operation and maintenance failures, illegal bypasses, effluent limit violations, and discharges of untreated sewage were cited as reasons for the mandated upgrades. Additional fines and civil penalties were levied as well. The City will necessarily have to raise sewer fees and disrupt service as improvements are made, potentially impacting local businesses and monthly residential water bills.

In August 2012, the Tennessee Department of Environment and Conservation announced an end to its seven-year sewer connection moratorium in Monteagle. The good news came after Monteagle opened its new 500,000 gpd WWTP in December 2011. The project was financed by Tennessee's Revolving Fund loan program as well as dollars from the American Recovery and Reinvestment Act. The new facility replaces two old plants, one of which collapsed completely and spilled 150,000 gallons of raw sewage into Juanita Creek in March 2009.³⁰ The community anticipates new economic growth now that the moratorium has been lifted.

Enacted in 1999, Governmental Accounting Standards Board Statement 34 (GASB 34) is a federal rule that requires state and local governments to report the value of their infrastructure assets, including water and sewer utilities. CEDS communities must thus report annual cash depreciation of their utility systems as well as any revenue shortfalls. Since public utilities do not generate income for local governments, their operations contribute a negative value to annual financial reports. This accrual accounting method, which is common practice in the private sector, has not translated well for municipal operations. GASB 34 has inhibited investment in new utility facilities as well as system annexations. The SETDD recommends that state and federal authorities amend reporting requirements for public utilities in order to encourage investment in new facilities and to allow for upgrades at existing plants.

Sewer: Major Findings

- Sewer plant and line improvements are needed to maintain service for existing residential, commercial, and industrial customers of the CEDS region. Most improvements are associated with aging or outdated infrastructure.
- Financially distressed communities throughout the CEDS region are burdened by WWTPs that are at capacity, in disrepair, or have a record of operational failures. These communities turn to the SETDD and other external agencies for assistance. However, limited public funds spread across an entire nation of equally needy communities mean many do not receive the aid they are hoping for. Consequently, some communities consider more desperate options such as utility (and sometimes municipal) annexations, self-imposition of development moratoriums, and even abolishment of municipal charters. The SETDD continues to seek funds for sewer improvements and encourages the States of Georgia and Tennessee to prioritize projects in this economically indispensable region.
- The federal GASB 34 rule has inhibited investment in public utilities, and it should be amended to reduce the hurdles of constructing of new systems and upgrading existing facilities.

Solid Waste

The Southeast Tennessee Municipal Solid Waste Planning Region was conceived in 1993 to provide long-term guidance to local governments in maintaining adequate solid waste collection, disposal, and recycling capacity. A solid waste plan was prepared and approved by the Tennessee Department of Environment and Conservation in 1994. The plan is updated annually in compliance with the Solid Waste Management Act of 1991 and submitted to TDEC for approval. In Georgia, each county is required to prepare a comprehensive plan, which includes a solid waste component with similar requirements to those for Tennessee counties.

As *Table 19* on the next page demonstrates, the CEDS region has enough solid waste disposal capacity for at least the next ten years.

Table 19. Destination of Solid Waste Generated by CEDS Counties: 2011

Sanitary Landfills	Waste Received (tons)	Projected Life (years)
Bradley County	198,172	19
Chattanooga-Birchwood	73,632	7
Marion County	39,717	21
McMinn County	34,929	23
Meadow Branch	147,224	11
Rhea County	205,876	19
Collinsville, AL (Allied/Republic Waste)	175,704	N/A

Construction & Demolition Landfills	Waste Received (tons)	Projected Life (years)
Bradley County C&D	57,669	23
Environmental Materials	84,163	9
McMinn County C&D	25,669	17

Source: SETDD

The Bradley County and Chattanooga Birchwood facilities serve north Georgia counties. Allied Waste, a private company, provides collection and disposal service to Dade County and a large portion of Hamilton County. Marion County's landfill provides disposal for all of Grundy and Sequatchie County's needs. Bledsoe County hauls its waste to Rhea County's facility, which also accepts some of Hamilton County's waste. Meigs County's waste goes to Meadow Branch landfill (McMinn County), which is privately owned and operated, while Polk County's waste goes to facilities in McMinn or Bradley County.

All of the landfills are regional and generally accept waste from any source because tipping fees for the waste are their only source of income. The costs associated with developing and operating a landfill are huge, and large volumes of waste are needed to finance operations as well as closure and post-closure care, which continues for at least 30 years after the landfill is closed.

In addition to assured disposal capacity, states require counties to reduce waste disposed of in a Class I (sanitary) landfill by 25 percent. This is accomplished through recycling programs, bans on waste tires in landfills, wood waste diversion to chipping operations, and diversion of construction and demolition materials. Curbside recycling is available only in Chattanooga, Cleveland, and East Ridge, but drop-off facilities exist in all CEDS counties. The percentages of waste diverted from Class I landfills by counties in Southeast Tennessee are presented in *Table 20* on the next page.

Table 20. Recycling and Waste Diversion Rates for Tennessee CEDS Counties: 2011

	Residential + Industrial Recycling		Residential Recycling Only	
	Tons Recycled	Waste Diverted	Lbs. per capita	County Rank
Bledsoe	136	3.4%	12	69
Bradley	69,997	30.1%	13	67
Grundy	193	3.4%	0	91
Hamilton	207,049	32.7%	35	36
Marion	32,952	56.5%	0	94
McMinn	29,492	39.6%	33	39
Meigs	117	1.8%	1	88
Polk	307	5.0%	5	78
Rhea	4,274	13.4%	5	76
Sequatchie	793	17.2%	19	54

Sources: TDEC, SETDD

The highest residential recycling score for any Tennessee CEDS county is 36th for Hamilton County. Industrial recycling accounts for Marion County's high waste diversion rate. If just residential recycling is considered, however, Marion collects an average of zero (0) pounds of recyclables per resident per year—as does Grundy—making these counties two of the lowest-ranked in the state for recycling. A low volume of collected goods combined with high transportation costs make recycling programs in rural areas cost-prohibitive. Nevertheless, the SETDD recommends exploring recycling initiatives, even if only in the denser urban clusters within these counties.

Solid Waste: Major Findings

- There is sufficient landfill capacity for the region's communities, but recycling rates for several CEDS counties are amongst the lowest in the state. The projected life of existing landfills could be extended if more waste is diverted through increased recycling.
- Curbside recycling is available in Chattanooga, Cleveland, and East Ridge. Recycling programs have proven profitable as both public and private enterprises across the country, and the SETDD encourages their promulgation throughout the CEDS region.
- The Southeast Tennessee Municipal Solid Waste Planning Region's plan adopted in November 1994 remains in effect. The Southeast Region is the state's only waste planning board that is still active. Annual progress reports record the operations of the region's solid waste facilities. The SETDD also assists in the compilation of 5-year needs assessments for its CEDS counties located in Tennessee.

Broadband Telecommunications

The map on the next page shows that broadband internet access is available throughout of the CEDS region, including its rural areas. Most non-coverage areas consist of forest, park, and agricultural lands with very low population densities.

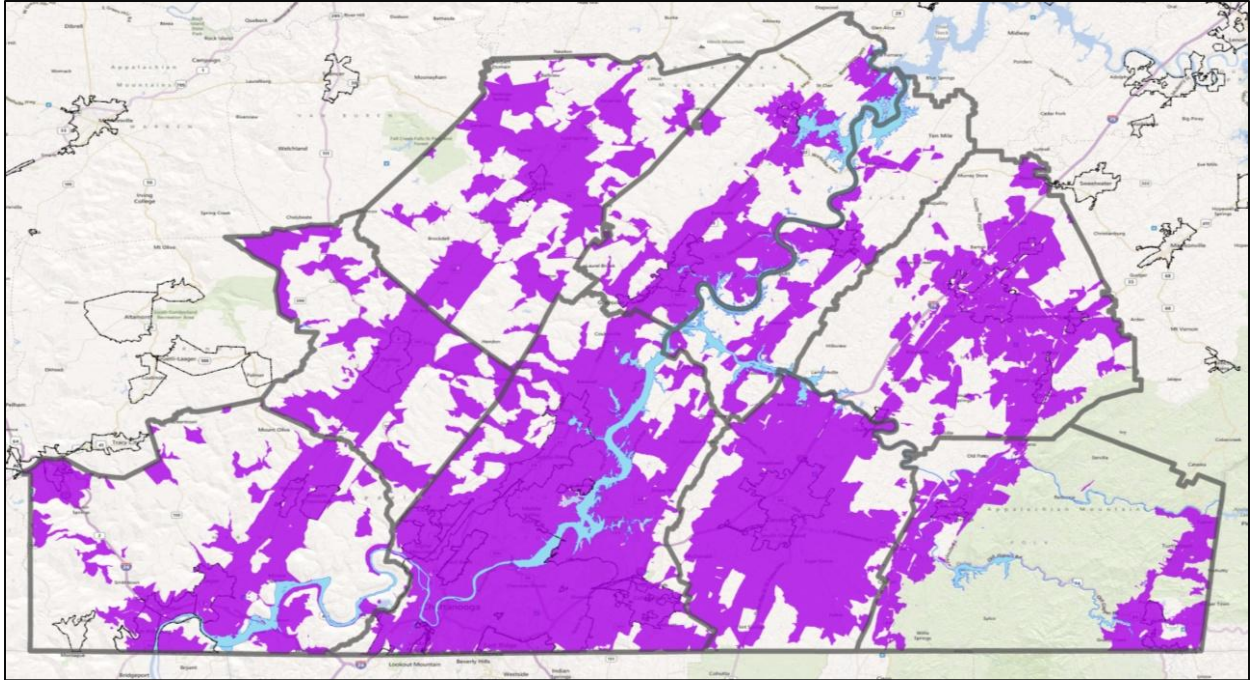


Figure 14. Broadband Availability in Southeast Tennessee: 2012

Source: Connect Tennessee, 2012; SETDD

Currently, information is not available for the geographic distribution of broadband in Catoosa, Dade, and Walker Counties. The State of Georgia does provide a grant program to assist rural counties in developing broadband coverage through the One Georgia Authority.

Competition between private telecommunications companies and the region's publicly owned utility, EPB, ensures a variety of plans are offered at affordable rates. EPB's gigabit plan (1,000 Mbps) was the first in the nation to offer such a high level of bandwidth to corporate and residential customers. This unprecedented broadband infrastructure is expected to attract web developers and tech companies to the CEDS region. But even at its newly lowered rate of \$299 per month, many view the gigabit plan as cost-prohibitive to entrepreneurial developers. When the price was its original \$350 per month in August 2012, just 34 customers—25 businesses and 8 residential accounts—subscribed to the gigabit service.³¹ With Kansas City partnering with Google, Inc. to offer the same service for \$100 per month, and with other cities looking to install gigabit networks, Chattanooga and EPB should explore options to maintain a competitive edge and attract new tech industries to the CEDS region.

Not calculable is the number of people who have full or partial internet access via smartphone, netbook, tablet PC, or other mobile device over 3G and 4G wireless data networks. A 2007 report by the Center for Disease Control mapped the physical infrastructure of mobile networks across the United States. Cellular antenna locations in the four-state area around the CEDS region are shown on the next page.

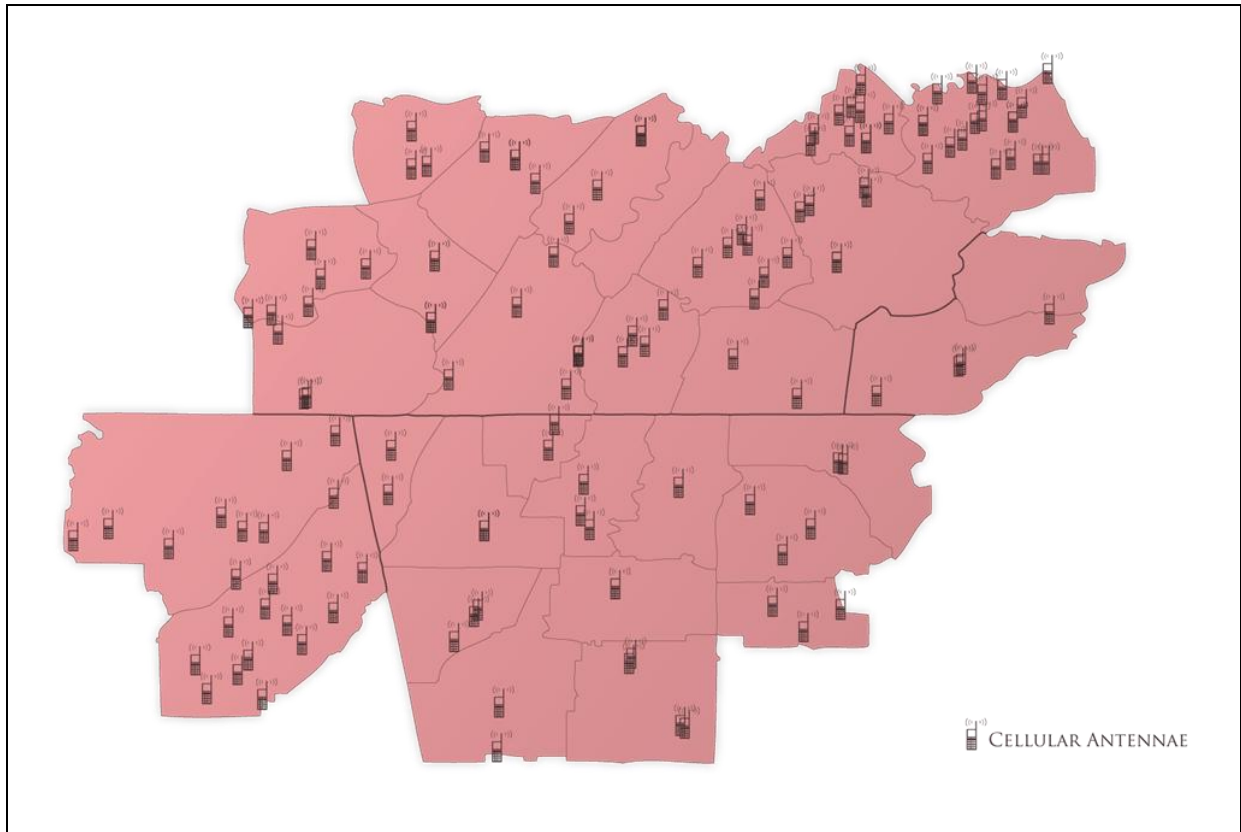


Figure 15. Cellular Antennas in the CEDS Region: 2007

Source: Tri-State Regional Workforce Alliance, 2010³²

Interestingly, the cell towers appear to follow major highways, with a few additional antennas interspersed around cities. A map showing service coverage ranges was not available, but given the mountainous geography of the region, it is unlikely that cell signals reach far beyond the service antennas. So, while there may be adequate coverage for people living near major highways and urban areas, connectivity throughout the CEDS's rural region remains spotty.

Broadband Telecommunications: Major Findings

- Broadband access is essential for today's businesses, governments, and educational institutions. In addition, many households access the internet on a daily basis. Broadband access and wireless coverage for all CEDS residents should be a priority for the SETDD, regional service providers, and jurisdictional governments.
- EPB's gigabit service capabilities are among the first in the nation and should be marketed to attract new tech industries to Chattanooga.

RESOURCES

The Northwest Georgia/Southeast Tennessee region has many resources that facilitate commerce and help support CEDS businesses and workforces. Responsible management of these resources is necessary to promote economic sustainability in the twenty-first century and beyond.

Energy

Energy resources and generation facilities are extremely important for the region's economy. The Tennessee Valley Authority is the largest electricity provider and one of the biggest employers in the Southeast Tennessee/Northwest Georgia region. Owned by the U.S. government, the company does not receive taxpayer support, nor does it operate to earn a profit.³³ Power generating facilities in the CEDS region include three hydroelectric dams—Nickajack, Chickamauga, and Watts Bar—and two nuclear plants—Sequoyah and Watts Bar. These sites employ several thousand of the region's workers. A second reactor is currently under construction at Watts Bar in Rhea County, providing close to 3,000 jobs through 2015. A pumped storage facility at Raccoon Mountain is another power source, but equipment problems shut the site down in March 2012 and the facility is likely to remain offline through 2014.³⁴

Abundant coal resources exist in the region, but mining this fossil fuel can have devastating impacts on the local geography, ecosystems, and water resources. Environmental regulations and pollution control requirements that govern coal mining are thus quite strict. Opening new mines requires overcoming many regulatory hurdles, and even then, operations remain high-risk. The extraction method known as mountaintop removal is extremely controversial but remains legal in Tennessee, despite efforts in the state legislature to ban the practice. Currently, there are no operational coal mines in the CEDS region, though one will likely be licensed and able to begin operations near Dayton in Rhea County by the end of 2013.

The State of Tennessee has made significant investments in new energy technologies. Geothermal sources aid with heating and cooling at several schools and other large public buildings in McMinn and Bradley County. Energy efficiency grants provided by the Tennessee Department of Economic and Community Development have funded retrofit projects in old public buildings that reduce utility costs and lessen environmental impacts. Previous retrofit projects have installed energy efficient lighting and HVAC systems. The SETDD has helped administer 33 ECD energy grants in Southeast Tennessee.

Businesses in the CEDS region have made their own commitments to energy efficiency as well. The new Volkswagen manufacturing facility in Hamilton County is the world's first and only LEED Platinum-Certified automotive factory. VW representatives say that the company's Chattanooga plant combines the "best practices" of more than twenty other of its facilities around the globe, and that its Chattanooga facility is the new benchmark for efficiency and design. In addition to the VW plant, there are more than fifty other LEED-certified buildings—most of them privately owned—throughout the CEDS region.³⁵

Other alternative energy technologies are being pursued as well. Currently, there is one solar field in Ducktown (Polk County). VW recently commenced construction on what will be the state's largest solar park: 33,600 panels that will generate 13.1 gigawatt hours of electricity each year, approximately 12.5 percent of the manufacturing facility's total energy needs. Besides solar, some companies and local governments have considered tapping into landfills to capture methane gas, but so far this is not being done.

To ensure reliable delivery of grid-based electrical services, local utility providers may consider burying power lines. This not only makes lines less susceptible to downed trees and high winds; it also improves the aesthetic character of communities. However, since underground lines are much more expensive to install, urban centers should be prioritized for this type of investment. Alternatively, EPB's smart grid system and its 1,200 IntelliRupter automated switches have demonstrably slashed the number of customers affected whenever there is damage to overhead lines—an investment that should be considered by other regional utilities.³⁶

Energy: Major Findings

- Most of the region's power is generated at hydroelectric and nuclear sites owned and operated by TVA, the region's largest electrical company. TVA provides many thousands of jobs for workers in the CEDS area and is a dominant force in the region's economy.
- Energy efficiency investments result in decreased utility costs and lower the region's impact on the environment. Combined with alternative and renewable energy sources, these investments are essential for attracting today's eco-conscious businesses. Local governments should promote constructing and renovating buildings that are LEED certified.
- EPB's smart grid investments and its installation of IntelliRupter automated switches has demonstrably reduced the number of homes and businesses affected during the region's severe weather events and subsequent power outages. Similar technologies should be implemented by other utility providers in the region.

Health Care

As noted in previous sections, the health care industry is projected to balloon over the next two decades as the CEDS region's 213,000 Baby Boomers transition into retirement. *Table 21* shows the number of existing health care facilities in the Tennessee CEDS counties.

Table 21. Medical Facilities in Southeast Tennessee: 2009

	No.	Type	Beds	Patients per Primary Care Physician
Bledsoe	1	Hospital	25	3,279:1
	2	Nursing Home	56	
Bradley	5	Hospital	351	1,225:1
	3	Nursing Home	476	
Grundy	1	Nursing Home	150	7,122:1
Hamilton	10	Hospital	1,905	616:1
	12	Nursing Home	1,700	
	1,134	Physician		
	209	Dentist		
	25	Psychiatrist		
	81	Psychologist		

Table continues on the next page.

Table 21. *Continued from the previous page.*

	No.	Type	Beds	Patients per Primary Care Physician
McMinn	2	Hospital	190	1,223:1
	4	Nursing Home	434	
Marion	1	Hospital	70	1,404:1
	1	Nursing Home	165	
Meigs	1	Nursing Home	88	2,386:1
Polk	1	Hospital	44	928:1
	1	Nursing Home	165	
Rhea	1	Hospital	25	2,071:1
	3	Nursing Home	277	
Sequatchie	1	Nursing Home	120	1,953:1

Source: *CountyHealthRankings.org*; Area Agency on Aging and Disability³⁷

For comparison, the national benchmark for the patients-to-physician ratio is 631:1. The only CEDS county that comes remotely close to this ideal ratio is Hamilton County. The number of physicians practicing in rural CEDS communities is woefully inadequate. This reflects the shortage of primary care doctors across the United States as a whole. The state and the region should provide incentives for doctors who work in rural areas.

New health care facilities to service an increasingly aging population are necessary. Additional nursing homes, physicians, and specialty health services will be required. The Southeast Tennessee Area Agency on Aging and Disability has waiting lists for nearly all of the services it provides, and is always in need of more resources. Health care access and affordability are important factors that weigh on retirees choosing places to live out their final years. Those areas with strong health care networks will be chosen over those that do not. If Chattanooga and the CEDS region hope to be a retirement destination, expansion of its health services is necessary.

Expanded health care resources can also help the region's population become healthier. When compared to the United States as a whole, most CEDS communities experience twice as many premature deaths, teen pregnancy rates 2-3 times the national average, above-average instances of sexually transmitted diseases, and below-average rates of mammography and diabetic screenings. The adult obesity rate in nearly every county is above 30 percent, compared to 25 percent nationally. Health statistics for each CEDS county are provided in *Appendix C*. Health education and regular wellness visits can improve these statistics and reduce the number of preventable hospital stays.

The Appalachian Regional Commission offers grants to provide equipment for hospitals and rural clinics, training for health care professionals, and support for health education programs. The SETDD is also exploring programs that would provide enhanced medical access via telecommunicating. For example, technicians could perform scans locally and have the results instantly reviewed by doctors at another location. Such technological services would allow for medical specialists and doctors to broaden their service areas while saving both time and money. The SETDD supports innovative means of delivering advanced medical services in areas where low population densities do not warrant a full-time facility and staff.

Health Care: Major Findings

- The aging generation of Baby Boomers will place an unprecedented strain on existing hospitals and other health care facilities. New and expanded facilities will be necessary to accommodate these increasing demands.
- The Southeast Tennessee Area on Aging and Disability currently has people on waiting lists to receive services. Demand for these services and those offered by other support programs is projected to increase in coming years; additional resources and funds are needed.
- Studies indicate a severe shortage of primary care physicians in rural CEDS counties. The state and region should provide incentives for doctors who open clinics in these areas.
- Technological innovations such as telecommunicating and mobile units can increase the provision of health care services in rural areas in a manner that is both cost and time efficient. The SETDD is currently pursuing ARC grants and will pursue other sources to improve and innovatively expand health services in Northwest Georgia and Southeast Tennessee.

Industrial Parks

Industrial parks are either publicly or privately owned properties with utility and transportation connections in place that are readily able to support new manufacturing centers, industrial facilities, and other business operations. Each county in the region has at least one industrial park.

Table 22. Industrial Parks in the CEDS Region: 2012

Address	City, State	Size (Acres)		Rail Access
		Min	Max	
1494 Happy Valley Road - Happy Valley Road Property	ROSSVILLE, GA	5	50	No
2400 Denso Drive - Athens McMinn Interstate Industrial Park	ATHENS, TN	5	350	No
2515 Benton Pike	CLEVELAND, TN	82		No
2800 Riverport Road - Centre South Riverport Industrial Park	CHATTANOOGA, TN	10	50	Yes
300 Payne Lane - Hollin Property	DAYTON, TN	5	200	Feasible
310 Sequachee Industrial Drive - Sequachee Valley/Dunlap Industrial Park	DUNLAP, TN	5	57.99	No
3400 Cummings Road - Cummings Road Site	CHATTANOOGA, TN	5	145	Feasible
381 Hwy 127 - Pikeville Industrial Site	PIKEVILLE, TN	5	50	No
441 Allan P. Deakins Road - Bledsoe/Pikeville Industrial Park	PIKEVILLE, TN	5	18	No
443 Industrial Drive - Marion County Industrial Site	JASPER, TN	5	30	No
620 Industrial SW	CLEVELAND, TN	5	40	Yes
Barney Lane And 20th Street NE - Pinnacle Industrial Park	CLEVELAND, TN	5	35	Feasible
CBIP 33 Acre site	CLEVELAND, TN	5	33	Yes
Highway 156 and Port Road - Nickajack Industrial Site & Port	NEW HOPE, TN	5	90	Yes
Highway 308 and Haney Road - Hiwassee River Industrial Park	CHARLESTON, TN	18	18	No
Highway 50 - Pelham Industrial Park	MONTEAGLE, TN	5	63	No
Highway 58 Near SR60 - Meigs South Industrial Site	DECATUR, TN	5	52	No

Table continues on the next page.

Table 22. *Continued from the previous page.*

Address	City, State	Size (Acres)		Rail Access
		Min	Max	
Industrial Drive - Tracy City/Monteagle Industrial Site	TRACY CITY, TN	49	49	No
Industrial Park Drive - Copper Basin Industrial Park	DUCKTOWN, TN	5	60	No
Manufacturers Road - Dayton Industrial Park	DAYTON, TN	5	36	Yes
McCarter Road - McCarter Road Industrial Site	LA FAYETTE, GA	14	14	No
Athens/McMinn County Industrial Site (Mt. Verde)	ATHENS, TN	20	223	No
I-75 Exit 20 – Interchange South Industrial Park	CLEVELAND, TN	10	300	No
Hiwassee River Industrial Park	CHARLESTON, TN	17.9	17.9	No

One noteworthy deletion from the list of available sites in *Table 22* is the 1,600-acre Enterprise South Industrial Park. This complex, located off of I-75 in Chattanooga, is now occupied by the Volkswagen manufacturing plant. VW has retained plenty of space to expand in the future while also preserving large portions of the property for wildlife habitat.

With Enterprise South no longer available, Hamilton County and Chattanooga are now relatively limited in their offering of large properties available for development. The available acreage at Centre South has been reserved for companies that will utilize the property's rail access. Currently, the largest site in the CEDS region is the Athens-McMinn Interstate Industrial Park, which has 350 acres available for industrial use, followed by the 300-acre Interchange South Industrial Park in Cleveland. New large sites are needed in order for manufacturing operations akin to the VW campus to move into the region.

Multiple CEDS businesses have expressed interest in having an intermodal yard within the CEDS region; the closest existing transfer station is in Atlanta. Previous attempts at converting an approximately 400-acre site in Walker County into a truck/rail intermodal yard have fallen through due to problems with the existing GDOT rail lines. Because of the demand, cost savings, and economic benefits of such a facility, the SETDD supports the development of an intermodal yard within the CEDS region.

Industrial Parks: Major Findings

- With the development of Enterprise South by Volkswagen, availability of industrial sites in Hamilton County is now limited. Additional properties to support large-scale manufacturing operations should be developed in the middle and southern CEDS counties.
- CEDS industrial parks should apply for the TN Certified Sites Program. Though the process can be costly, the SETDD and SEIDA recommend seeking certification. Approved sites are typically fast-tracked for development by the state and ECD.
- Expanded utility infrastructure and new locations with port and/or rail access are needed. The SETDD supports the development of an intermodal yard in the CEDS region.

ENVIRONMENT

The CEDS region's humid subtropical climate and mixed geography of mountains, rivers, valleys, and plateaus support a diverse range of aquatic and terrestrial ecosystems, animal habitats, agricultural lands, and natural resources. These environmental features provide many economic opportunities for CEDS communities. Travelers visit the region for tourism, outdoor recreation, and hunting. Miners and loggers extract both renewable and nonrenewable resources from the earth. Farmers raise livestock and produce an array of crops on the region's rich agricultural fields. However, the region's interconnected ecosystems are fragile and must be carefully managed. The elements below introduce the region's environment and its role in the CEDS economy.

Watersheds

The Southeast Tennessee region is divided into 117 subwatersheds that contribute to 11 distinct regional watersheds. The Sequatchie, Hiwassee, Little Tennessee, Lower Tennessee, Watts Bar Lake, and Ocoee are all located within the Upper Tennessee River Basin.

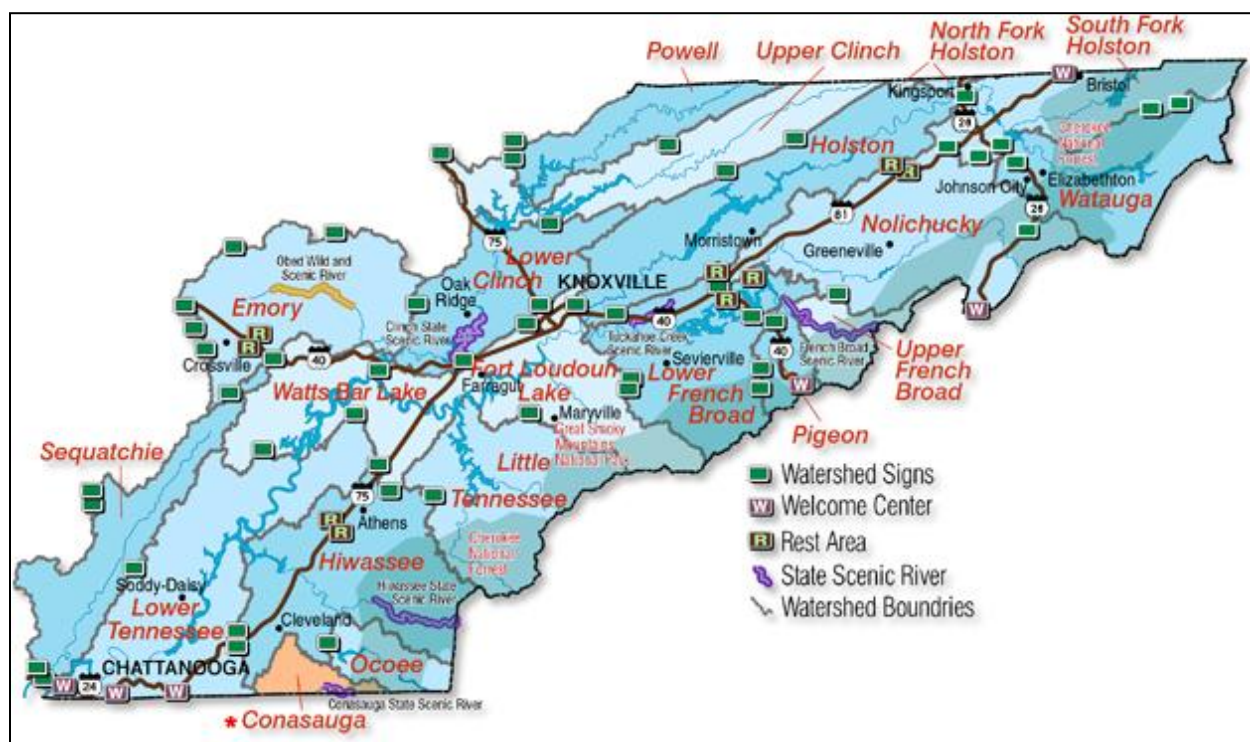


Figure 16. Watersheds in the Upper Tennessee River Basin

Source: Tennessee Department of Environment and Conservation³⁸

Watershed Management Plans exist for each watershed to regulate water resources with regard to local needs as well as downriver demands. These plans also keep track of point and nonpoint sources of pollution and help establish water quality standards, National Pollutant Discharge Elimination Systems (NPDES) requirements, Total Maximum Daily Loads (TMDL) limits, and best practices for nonpoint pollution control. Pollution control measures are essential to protect the region's water sources. In addition, new planning initiatives based on regional watersheds are gaining traction as necessary elements of long-term sustainability planning in the twenty-first century.

Watersheds: Major Findings

- Availability and access to clean water sources is essential for population health, economic vitality, and long-term regional sustainability. In recognition of this, the Thrive 2055 initiative will uphold watersheds as a cornerstone when formulating its 40-year sustainability and community development recommendations. The SETDD strongly supports the integration of shared regional watersheds in this inter-state planning initiative.
- Point sources and sewer utilities that are outdated, in disrepair, or have a history of pollution violations can wreak havoc of regional resources. The SETDD thus seeks grants and other support programs to modernize, replace, and repair dilapidated systems.
- Although nonpoint sources are more difficult to regulate, Best Practices can help limit runoff and erosion. Land development codes can mandate on-site stormwater capturing and impose impervious surface limitations. Otherwise, the SETDD will seek funds to install rain gardens and barrels, bioswales, pervious pavement, and other green infrastructure that minimize runoff and nonpoint source contamination.

Agriculture

Farming is an economic staple of the CEDS region and generates millions in revenues for the local economy every year. The 2007 agricultural census indicated the following acreages of corn, wheat, soybeans, and forage in Southeast Tennessee:

Table 23. Acreages of Major Crops in Southeast Tennessee: 2007

	Corn	Wheat	Soybeans	Forage/Hay
Bledsoe	1,453	N/A	688	21,424
Bradley	870	453	889	20,421
Grundy	2,609	317	2,276	6,620
Hamilton	322	128	N/A	12,051
McMinn	871	469	2,358	30,420
Marion	2,063	1,114	4,817	9,106
Meigs	N/A	N/A	N/A	10,884
Polk	667	1,521	2,259	6,403
Rhea	680	N/A	N/A	10,943
Sequatchie	675	333	N/A	4,965

Source: Purdue University Center for New Crops & Plants Products³⁹

Fruit and vegetable farms abound in the region but vary according to elevation, climate, and terrain. Crops include cucumbers, squash, pumpkins, sweet corn, tomatoes, greens, apples, peaches, pears, blueberries, grapes, cantaloupes, watermelons, beans, cabbage, persimmons, spinach, pecans, garlic, lettuce, peppers, and others.

Unfortunately, farming in the CEDS region and across the United States as a whole is currently on a fragile footing. Two years of back-to-back La Niña weather patterns over the Pacific Ocean have created lasting drought conditions across most of the continental United States. *Figure 17* on the next page shows the severity of the ongoing drought.

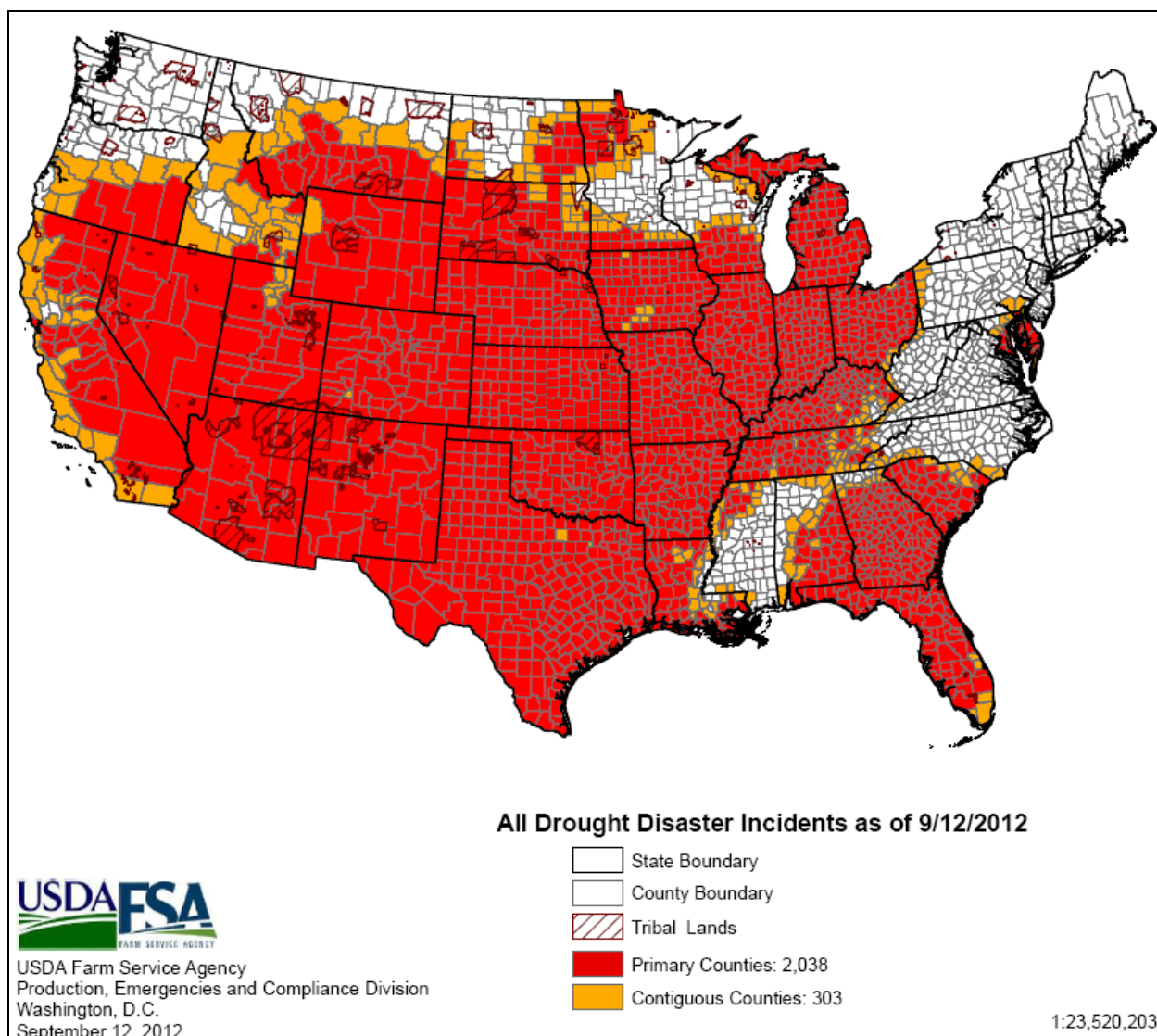


Figure 17. USDA Drought Designations: 2012

Source: USDA Farm Service Agency⁴⁰

Despite widespread drought conditions, Grundy, McMinn, and Meigs Counties are the only CEDS counties that have been designated Drought Disaster Counties by the USDA.⁴¹ This designation makes these communities eligible for emergency funding to support livestock and crop producers. Farmers may consider innovative watering techniques that deliver water directly to root systems. Though the initial equipment investments are higher, the long-term cost savings and contribution to environmental integrity are beneficial. Moreover, efficient irrigation and drainage systems can reduce water extracted from ground and surface systems while also significantly reducing the volume of pesticide and fertilizer-laden runoff entering the region's watersheds. County extension offices can assist farmers interested in innovative agricultural techniques and otherwise provide valuable support and financial assistance for farmers throughout the CEDS region.

Urban farms and community gardens are rising environmental trends that the SETDD supports. One such urban farm, Crabtree Farms, is located within the Chattanooga city limits and has approximately 5 acres of active fields that are largely tended by volunteers. The farm regularly

hosts school groups, civic organizations, and other community groups. One of the goals of Crabtree Farms is to educate and inspire younger generations to become interested in agriculture. The farm has also fostered mutually beneficial partnerships with businesses and residents in the Chattanooga area through its community-supported agriculture (CSA) program: investors pay a fee at the beginning of the growing season that allows the farm to buy equipment, seeds, and other supplies, and in return, the farm delivers baskets of fresh, seasonal produce to those investors on a weekly basis for the duration of the growing season.

Multiple community gardens exist throughout the CEDS region. Typically divided into plots that are tended by residents from the surrounding neighborhoods, these gardens are a great way of transforming old, abandoned lots into valuable community assets. They build social capital, provide green space, and are a source of nutritious produce—especially in low-income neighborhoods, where access to fresh fruits and vegetables is frequently limited. Such areas are known as “food deserts” and are defined by the USDA as areas more than 1 kilometer away from a reliable source of health foods, among other factors. Within the CEDS region, the greatest concentration of food deserts is in and around downtown Chattanooga.

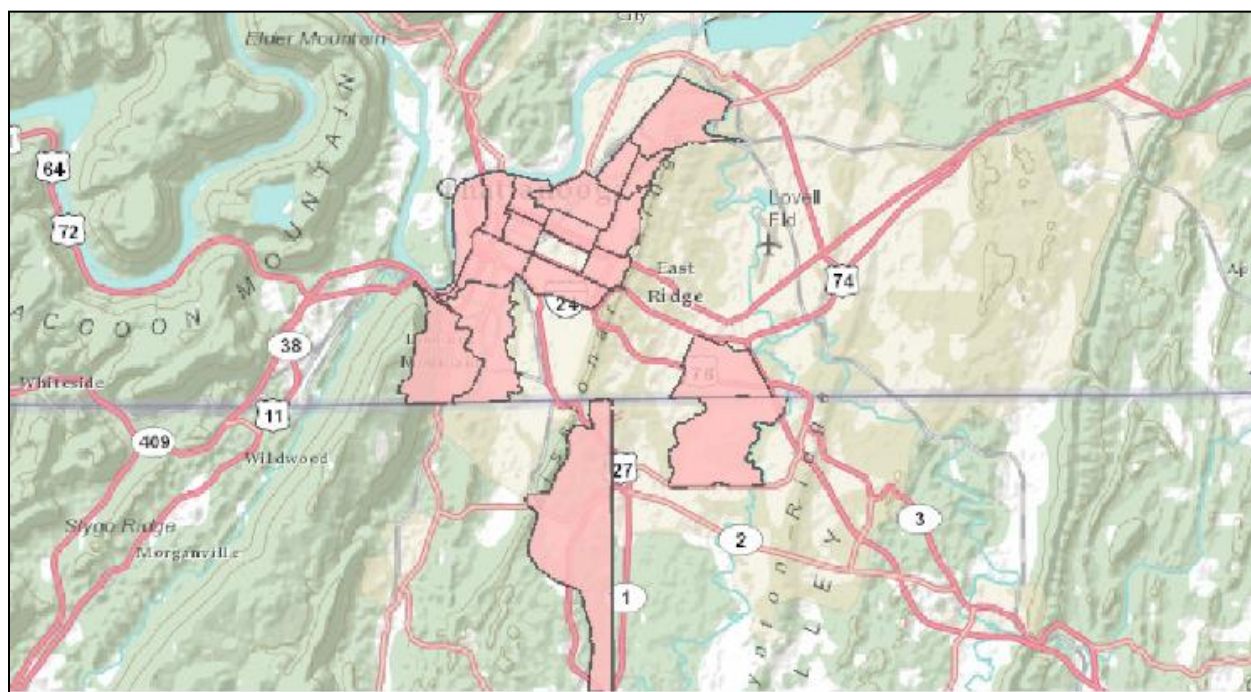


Figure 18. USDA-Designated Food Deserts in the Greater Chattanooga Area: 2012

Source: USDA Food Desert Locator

Three additional food deserts exist in the CEDS region: in Cleveland, TN; in Graysville/Dayton, TN; and Lafayette, GA. The SETDD encourages local municipalities to amend their codes so as to allow for low intensity food production in urban areas.

Agriculture: Major Findings

- Agricultural is a pillar of the region’s economy. To increase productivity and keep the region’s farms economically viable, county extension offices should help farmers learn innovative techniques that increase yield while also ensuring the long-term integrity of the region’s soils.

- Long-term drought conditions have made some communities eligible for additional USDA support. Farmers should consider these assistance programs while also applying more sustainable agricultural practices that decrease the burden on the region's aquatic resources.
- Urban farms provide green space in developed areas and can inspire young people to pursue agricultural careers while educating the community at large about the importance of healthy foods. Community-supported agriculture (CSA) programs are mutually beneficial partnerships that help finance farm operations in exchange for weekly deliveries of fresh, seasonal, locally harvested produce. The SETDD encourages communities across the CEDS area to permit urban farms as well as community gardens within their jurisdictions.

Tourism

Campers, hunters, fisherman, tourists, and outdoors enthusiasts flock to this part of Tennessee to enjoy the many recreational opportunities available throughout the region. Whitewater rafting on the Ocoee River is made possible by timed releases, delivering a world-class rafting experience. Many canoers, kayakers, and sports fisherman also take advantage of the region's many water features, both natural and manmade. State and federal parks are located in multiple CEDS counties and attract thousands of visitors annually.

Preservation of the region's natural areas in order to maintain a quality outdoor experience while also promoting industries such as mining, logging, livestock, and real estate development is a delicate balancing act that must weigh many conflicting interests. It is widely recognized that degradation of the environment in the name of economic development will have dire consequences for the region's tourism industry. Ultimately, the SETDD hopes that businesses and governments in the CEDS region will be responsible stewards of the land and its finite natural resources.

One example that illustrates such competing demands between economic and environmental interests involves a recent change in ownership of a prominent timber company. In the fall of 2011, more than 80,000 acres of timberlands in Bledsoe, Grundy, Hamilton, Marion, Rhea, and Sequatchie County went up for sale. The SETDD recognizes the importance of the logging industry in Tennessee but is concerned over the impacts of erosion on watershed integrity, of deforestation on animal species, and of clear-cutting on the region's viewsheds. The District encourages sustainable extraction techniques, reforestation, preservation of old-growth forests, and where possible, minimal impacts on public viewsheds.

In the end, Southeast Tennessee's outdoor tourism industry depends on responsible management of the region's environment. There is room for nature and industry, but they must exist harmoniously to endure for the twenty-first century and beyond.

Tourism: Major Findings

- Many outdoor recreation and tourism opportunities exist in the CEDS region, yet there are also high-impact economic operations—logging, mining, real estate development—that are equally important to the region's economy. The SETDD encourages responsible harvesting of natural resources in a way that preserves viewsheds and the natural environment for both current and future residents and visitors to the Northwest Georgia/Southeast Tennessee region.

III. GOALS & OBJECTIVES

GOAL 1: Maintain existing manufacturing base and build infrastructure assets to attract employers with well-paying jobs to the region, especially in rural areas.

- **Objective (a):** Develop water, sewer, broadband, and energy utilities plus other infrastructure necessary to support both light and heavy manufacturing. Regional water and waste treatment facilities should be constructed for the Sequatchie Valley region.
- **Objective (b):** Improve industrial parks and expand capacity along major transportation corridors. Encourage industrial parks to become registered as Certified Sites with the State.
- **Objective (c):** Maintain existing transportation facilities and support the development of Corridor K, Highway 30, a truck-to-rail intermodal yard, and an inland port facility.

GOAL 2: Develop the skill sets of local workforces for demonstrable jobs in the Northwest Georgia/Southeast Tennessee region.

- **Objective (a):** Work with local educational leaders to ensure students are well-trained in the four STEM fields: science, technology, mathematics, and engineering. Increase the number of STEM high schools in the region.
- **Objective (b):** Strengthen existing industry-education partnerships and support the establishment of new targeted workforce training programs.
- **Objective (c):** Seek new funds to expand the availability of Career Center services.
- **Objective (d):** Support programs that provide technology training, strengthen interpersonal skills, and increase adult literacy, especially in rural areas.

GOAL 3: Prepare communities for an increasingly aging population.

- **Objective (a):** Expand the capacity of the region's senior services and health care facilities. Position those entering the workforce today for careers in the health care and service sectors.
- **Objective (b):** Ensure SETHRA and the Area Agency on Aging and Disability have adequate resources to assist low-income members of the populations through retirement.
- **Objective (c):** Market the Northwest Georgia/Southeast Tennessee region as an attractive retirement and tourism destination for seniors.

GOAL 4: Support small business and startup operations that will grow and provide local jobs.

- **Objective (a):** Support business development programs throughout the area and help communities understand the importance of small businesses to local economic development.
- **Objective (b):** Ensure entrepreneurs and small business owners have adequate access to capital, financial resources, and technology systems. Help fledgling startups by establishing microloan/grant programs and by making available small business incubator sites.

GOAL 5: Enhance community character and develop sustainable communities.

- **Objective (a):** Include quality-of-life and multimodal enhancements as components of placemaking initiatives within local communities. Preserve valuable natural and cultural sites.
- **Objective (b):** Build regional recreational attractions including greenways and bike trails.
- **Objective (c):** Enforce development codes and adopt provisions that enhance community aesthetics. Encourage the use of form-based codes, even if only for trial periods.
- **Objective (d):** Promote bike share programs and install electric charging and CNG refueling stations to support green personal transit.
- **Objective (e):** Incentivize LEED construction projects and otherwise expand green infrastructure to reduce energy consumption as well as water runoff and use.

IV. PROJECT LIST

TIER 1: VITAL PROJECTS & ACTION PLANS

Action Plans (13 C.F.R. § 303.7(b)(8)) have been prepared for the following projects, which the Development District has prioritized as most essential for economic development and investment across the CEDS region. Of course, the District will seek to initiative progress on projects in both Tiers as funding opportunities become available.

EXPANSION OF WATER RESOURCES THROUGHOUT SEQUATCHIE VALLEY/CUMBERLAND PLATEAU REGION

Description: Water capacity is limited in the Sequatchie Valley/Cumberland Plateau area because of limited well capacities, inadequate reservoirs, and low-flow periods on the Sequatchie River. New or expanded water plants on the Tennessee River, which has an unlimited supply, would provide the necessary volumes of water to accommodate development occurring in the region. Other alternatives include new and/or expanded reservoirs and utility acquisition of existing lakes. Water needs in the region have grown due to demand for a new state prison in Bledsoe County, large developments in Marion and Sequatchie Counties, and several municipal systems that could lose their water sources if extended drought conditions persist.

Benefitted Areas: Marion, Hamilton, Grundy, Rhea, and Sequatchie Counties

Anticipated EDA Funding Request: \$2,000,000

Estimated Private Investment: \$110,000,000

Jobs Saved or Created: 350

Funding Sources: Community Development Block Program (TN ECD), USDA Rural Development, and the Appalachian Regional Commission

Action Plan: 2012 – Prepare and submit CDBG applications

2013 – Prepare additional funding applications

2014 – Commence construction

2015 – Projected project completion date

CONSTRUCTION OF REGIONAL WASTEWATER TREATMENT FACILITIES

Description: A regional wastewater treatment plant is required for municipalities in the region that includes Monteagle, Sewanee, Tracy City, and Pelham. Although Monteagle has wastewater treatment capacity provided by a plant that opened in 2012, there remains demand for additional capacity in this region. Planned commercial development cannot proceed without a new wastewater plant. Currently, more than half of the region's workforce commutes as far as 50 miles for work; new treatment plants are projected to bring jobs closer to this region. Approximately \$150,000 is needed to assess treatment plant options prior to any construction.

Benefitted Areas: Grundy, Coffee, Franklin, and Marion Counties

Anticipated EDA Funding Request: \$1,650,000

Estimated Private Investment: \$15,000,000

Jobs Saved or Created: 45

Funding Sources: Community Development Block Program (TN ECD), USDA Rural Development, and the Appalachian Regional Commission

Action Plan: 2012 – Prepare and submit CDBG applications

2013 – Prepare additional funding applications

2014 – Commence construction

2015 – Projected project completion date

ESTABLISHMENT OF INLAND PORT FACILITY

Description: As fuel prices increase, materials transport by barge becomes more cost-effective. Analyses in this CEDS's Existing Conditions section also indicate that large volumes of goods are shipped into and out of in the area. An inland port facility located in Marion or Hamilton County along the Tennessee River would fit well with the transport-based economy that is already prevalent in the region. Barge transport via the Tombigbee Waterway would provide a direct link to Gulf Coast sea ports, while the Tennessee River provides access to the Ohio and Mississippi River. Providing rail linkages and other industrial park improvements are further goals of this project.

Benefitted Areas: Dade, Grundy, Hamilton, and Sequatchie Counties

Anticipated EDA Funding Request: \$1,500,000

Estimated Private Investment: \$35,000,000

Jobs Saved or Created: 200

Funding Sources: Community Development Block Program (TN ECD), USDA Rural Development, and the Appalachian Regional Commission

Action Plan: 2012-2013 – Prepare and submit grant applications in order to prime property for development

TIER 2: SECONDARY PROJECTS

The SETDD and CEDS Committee have identified these projects as also being important for regional economic development. Staff will pursue action on these items as funding sources become available.

SEWER EXTENSION TO MOUNT VERDE INDUSTRIAL PARK

Description: Development in the Mount Verde industrial park and at the Niota I-75 exit is dependent on the extension of sewer service to these sites. Industrial and commercial development at these sites will help assure the economic vitality of the Athens region.

Benefitted Areas: McMinn, Bradley, and Monroe Counties

Anticipated EDA Funding Request: \$1,500,000

Estimated Private Investment: \$130,000,000

Jobs Saved or Created: 700

NORTH ETOWAH INDUSTRIAL PARK RAIL SPUR AND SEWER EXPANSION

Description: The Waupaca Foundry is a major source of employment for this part of the region. Though the economic downturn resulted in an idled plant for several years, operations at the foundry have resumed. In order to expand productivity and provide new employment opportunities, the foundry and other sites at the industrial park require increased access to the CSX network via rail spurs. Installation of these rail spurs could potentially qualify the North Etowah Industrial Park to become the first and only CSX Certified Site in the State of Tennessee. Additional municipal wastewater treatment capacity is also needed and will require installation of larger sewer lines leading to the treatment plant in Etowah.

Benefitted Areas: McMinn, Polk, Bradley, and Monroe Counties

Anticipated EDA Funding Request: \$1,000,000

Estimated Private Investment: \$160,000,000

Jobs Saved or Created: 250

WHIRLPOOL UTILITIES AND RAIL EXPANSION

Description: Utilities and rail access are needed to a new industrial site in Cleveland where Whirlpool is relocating operations from its old, dilapidated facilities in central Cleveland. The City is planning to revitalize the abandoned area through EPA Brownfields funding.

Benefitted Areas: Bradley County

Anticipated EDA Funding Request: \$1,000,000

Estimated Private Investment: \$120,000,000

Jobs Saved or Created: 500

COMPREHENSIVE GROWTH PLAN AND NEEDS ASSESSMENT (THRIVE 2055)

Description: Development of a comprehensive plan to deal with growth associated with the location of the Volkswagen assembly plant at Enterprise South, Wacker in the Hiwassee Industrial Park, and two Amazon distribution centers in Hamilton and Bradley Counties is needed. This will be a regional effort to determine the need for infrastructure, housing, schools, and other community resources throughout the tri-state region. An assessment of the region's aging population is also needed, especially as hundreds of thousands of Baby Boomers transition into retirement.

Benefitted Areas: Bledsoe, Bradley, Catoosa, Dade, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie, and Walker Counties

Anticipated EDA Funding Request: \$300,000

Estimated Private Investment: \$50,000

Jobs Saved or Created: N/A

EXPANSION OF THE REGION'S ENERGY ECONOMY

Description: Provide assistance to energy-related companies relocating the southeast Tennessee area (e.g. Wacker Chemical). Development of the region's solar, hydroelectric, wind, and nuclear sources—and companies that specialize in the design and manufacture of components for these technologies—will make the region an energy leader for the twenty-first century.

Benefitted Areas: Bledsoe, Bradley, Catoosa, Dade, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie, and Walker Counties

Anticipated EDA Funding Request: \$1,500,000

Estimated Private Investment: \$30,000,000

Jobs Saved or Created: 2,000

ESTABLISHMENT OF REGIONAL HIGH-SPEED RAIL CONNECTIONS

Description: Secure resources to support planning and funding efforts to develop a high-speed rail system between Atlanta and Chattanooga.

Benefitted Areas: Dade, Catoosa, Walker, and Hamilton Counties

Anticipated EDA Funding Request: N/A

Estimated Private Investment: N/A

Jobs Saved or Created: 500+

APPENDICES

APPENDIX A – Male vs. Female Population

Male and Female Populations of CEDS Counties

		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
Catoosa	M	2,117	2,314	2,489	2,263	1,796	1,794	2,023	2,254	2,289	2,324	2,052	1,906	1,741	1,339	998	706	407	216	31,028
	F	1,967	2,112	2,178	2,144	1,771	1,906	2,138	2,371	2,410	2,451	2,372	2,121	1,983	1,554	1,179	900	661	606	32,914
Dade	M	461	507	560	742	659	441	456	485	528	573	653	558	497	399	271	203	121	78	8,192
	F	451	442	464	711	684	459	479	489	531	626	645	601	534	407	332	248	189	149	8,441
Walker	M	2,157	2,312	2,469	2,319	1,837	1,972	2,293	2,339	2,367	2,604	2,518	2,198	2,070	1,516	1,154	803	517	331	33,781
	F	2,045	2,101	2,347	2,182	1,804	1,972	2,190	2,304	2,312	2,559	2,571	2,363	2,244	1,814	1,416	1,089	843	819	34,975
Bledsoe	M	325	379	410	535	359	385	455	512	555	593	557	473	495	379	258	148	93	53	6,964
	F	319	361	393	377	273	273	326	337	414	475	439	428	451	328	267	190	142	119	5,912
Bradley	M	3,084	3,310	3,360	3,469	3,577	3,012	3,026	3,217	3,411	3,577	3,383	2,983	2,721	2,252	1,578	1,136	669	411	48,176
	F	2,915	3,101	3,129	3,587	3,691	2,973	3,143	3,302	3,445	3,702	3,557	3,159	3,130	2,490	1,917	1,471	1,065	1,010	50,787
Grundy	M	428	492	466	448	351	378	381	436	446	506	489	451	446	421	281	190	105	70	6,785
	F	373	421	433	418	370	361	400	451	398	462	499	464	534	416	348	218	157	195	6,918
Hamilton	M	10,375	10,273	9,992	11,375	11,897	11,065	10,514	10,613	10,612	11,712	12,055	11,109	9,997	7,015	4,881	3,799	2,661	1,961	161,906
	F	9,990	9,715	9,670	11,543	12,210	11,231	10,513	10,806	11,134	12,268	13,155	12,388	10,836	8,078	6,299	5,429	4,548	4,744	174,557
McMinn	M	1,515	1,703	1,725	1,824	1,372	1,381	1,386	1,626	1,782	1,832	1,975	1,731	1,691	1,375	1,063	697	428	281	25,387
	F	1,467	1,548	1,700	1,750	1,399	1,445	1,479	1,672	1,783	2,001	1,987	1,910	1,769	1,504	1,142	921	696	706	26,879
Marion	M	822	876	940	887	787	762	831	879	973	1,033	1,068	1,003	1,037	771	500	380	209	123	13,871
	F	746	840	875	817	772	717	811	904	909	1,123	1,175	1,127	1,040	818	607	458	344	283	14,366
Meigs	M	304	341	397	375	275	288	341	400	427	438	442	431	483	403	215	148	81	58	5,847
	F	295	381	382	338	273	265	346	399	401	472	454	445	475	363	230	171	115	101	5,906
Polk	M	478	530	577	538	426	382	454	589	618	656	597	591	600	530	352	233	146	74	8,371
	F	427	480	575	514	416	401	476	548	594	623	653	589	621	518	355	285	193	186	8,454
Rhea	M	970	1,100	1,104	1,105	978	831	921	1,018	1,051	1,054	1,144	999	1,079	838	554	408	250	164	15,568
	F	1,019	1,040	1,011	1,062	1,040	862	937	1,006	1,055	1,112	1,142	1,115	1,058	919	675	469	347	372	16,241
Sequatchie	M	446	476	471	511	387	366	408	484	483	524	496	475	482	409	274	152	99	63	7,006
	F	421	474	449	442	340	383	394	477	402	521	536	510	464	438	286	189	136	154	7,106
REGION TOTALS	M	23,482	24,613	24,960	26,391	24,701	23,062	23,489	24,852	25,542	27,416	27,429	24,908	23,339	17,647	12,379	9,003	5,786	3,883	372,882
	F	22,435	23,016	23,606	25,885	25,043	23,248	23,632	25,066	25,878	28,395	29,185	27,220	25,139	19,647	15,053	12,128	9,436	9,444	393,456
TOTALS		45,917	47,629	48,566	52,276	49,744	46,310	47,121	49,918	51,470	55,811	56,614	52,128	48,478	37,294	27,432	21,131	15,222	13,327	766,338

Source: U.S. Census Bureau, 2010 Decennial Census; SETDD Calculations

APPENDIX B – Status of Planning and Land Use Controls⁴²

STATUS OF LAND USE CONTROLS
SOUTHEAST TENNESSEE REGION (JANUARY, 2011)

COUNTY/ MUNICIPALITY	LPO CON- TRACT	ACTIVE PLAN. COMM.	MUN.- DESIG- REG.	COUNTY ZONING	MUN. ZONING	MUN./ REG. ZONING	SUB. REGS.
Bledsoe Co.	No	No	---	No	---	---	No
Pikeville	No	No	No	---	No	No	No
Bradley Co.	No	Yes	---	Yes	---	---	Yes
Charleston	No	Yes	No	---	Yes	No	No
Cleveland	No	Yes	No	---	Yes	No	Yes
Grundy Co.	No	No	---	No	---	---	No
Altamont	No	No	No	---	No	No	No
Beersheba Springs	No	No	No	---	No	No	No
Coalmont	No	No	No	---	No	No	No
Gruetli-Laager	No	No	No	---	No	No	No
Monteagle	Yes	Yes	Yes	---	Yes	No	Yes
Palmer	No	No	No	---	No	No	No
Tracy City	No	No	No	---	No	No	No
Hamilton Co.	No	Yes	JR	Yes	---	---	Yes
Chattanooga	No	Yes	JR	---	Yes	No	Yes
Collegedale	Yes	Yes	No	---	Yes	No	Yes
East Ridge	No	Yes	JR	---	Yes	No	Yes
Lakeside	No	Yes	JR	---	Yes	No	Yes
Lookout Mtn.	No	Yes	JR	---	Yes	No	Yes
Red Bank	No	Yes	No	---	Yes	No	Yes
Ridgeside	No	Yes	JR	---	Yes	No	No
Signal Mtn.	No	Yes	No	---	Yes	No	Yes
Soddy Daisy	No	Yes	No	---	Yes	No	Yes
Walden	No	Yes	JR	---	Yes	No	Yes
Marion Co.	Yes	Yes	---	No	---	---	Yes
Jasper	Yes	Yes	Yes	---	Yes	No	Yes
Kimball	Yes	Yes	No	---	Yes	No	Yes
New Hope	No	Yes	No	---	Yes	No	Yes
Orme	No	No	No	---	No	No	No
Powell's Crossroads	Yes	Yes	No	---	Yes	No	Yes
South Pittsburg	Yes	Yes	No	---	Yes	No	Yes
Whitwell	No	Yes	No	---	No	No	No
McMinn Co.	Yes	Yes	---	No	---	---	Yes
Athens	No	Yes	Yes	---	Yes	No	Yes
Calhoun	No	Yes	No	---	No	No	No
Englewood	Yes	Yes	No	---	Yes	No	Yes
Etowah	Yes	Yes	Yes	---	Yes	No	Yes
Niota	Yes	Yes	No	---	No	No	Yes
Meigs Co.	Yes	Yes	---	Yes	---	---	Yes
Decatur	Yes	Yes	No	---	Yes	No	Yes
Polk Co.	Yes	Yes	---	No	---	---	Yes
Benton	Yes	Yes	No	---	Yes	No	Yes
Copperhill	No	Yes	No	---	Yes	No	Yes
Ducktown	Yes	Yes	No	---	No	No	Yes
Rhea Co.	Yes	Yes	---	No	---	---	Yes
Dayton	Yes	Yes	No	---	Yes	No	Yes
Graysville	Yes	Yes	No	---	Yes	No	Yes
Spring City	Yes	Yes	No	---	Yes	No	Yes
Sequatchie Co.	No	No	---	No	---	---	No
Dunlap	Yes	Yes	No	---	Yes	No	Yes

Legend – JR – Joint Regional

**STATUS OF BUILDING CODES/FLOOD INSURANCE
SOUTHEAST TENNESSEE REGION (JANUARY, 2011)**

COUNTY/ MUNICIPALITY	BUILDING CODE	BUILDING INSPECTIONS	NFIP
Bledsoe Co.	No	No	Yes
Pikeville	Yes	S	Yes
Bradley Co.	Yes	L	Yes
Charleston	Yes	L	Yes
Cleveland	Yes	L	Yes
Grundy Co.	No	No	Yes
Altamont	No	No	No
Beersheba Springs	No	No	No
Coalmont	No	No	No
Gruetli-Laager	No	No	No
Monteagle	Yes	L	No
Palmer	No	No	Yes
Tracy City	Yes	S	No
Hamilton Co.	Yes	L	Yes
Chattanooga	Yes	L	Yes
Collegedale	Yes	L	Yes
East Ridge	Yes	L	Yes
Lakesite	Yes	L	Yes
Lookout Mtn.	Yes	L	Yes
Red Bank	Yes	L	Yes
Ridgeside	Yes	L	No
Signal Mtn.	Yes	L	Yes
Soddy Daisy	Yes	L	Yes
Walden	Yes	L	No
Marion Co.	Yes	L	Yes
Jasper	Yes	L	Yes
Kimball	Yes	L	Yes
New Hope	Yes	L	Yes
Orme	Yes	L	No
Powell's Crossroads	Yes	L	Yes
South Pittsburg	Yes	L	Yes
Whitwell	Yes	L	Yes
McMinn Co.	No	No	No
Athens	Yes	L	Yes
Calhoun	No	No	Yes
Englewood	Yes	L	Yes
Etowah	Yes	L	Yes
Niota	Yes	S	No
Meigs Co.	Yes	S	Yes
Decatur	Yes	S	Yes
Polk Co.	No	No	Yes
Benton	Yes	S	Yes
Copperhill	Yes	S	Yes
Ducktown	Yes	L	Yes
Rhea Co.	Yes	S	Yes
Dayton	Yes	L	Yes
Graysville	Yes	L	Yes
Spring City	Yes	L	Yes
Sequatchie Co.	No	No	No
Dunlap	No	No	Yes

LEGEND: S = State Enforcement (Commerce & Insurance) L = Locally Enforced

**STATUS OF 3-STAR/MAIN STREET-TENNESSEE DOWNTOWNS/RETIRE TENNESSEE
SOUTHEAST TENNESSEE REGION (JANUARY, 2011)**

COUNTY/ MUNICIPALITY	3-STAR	MAIN STREET/ TENNESSEE DOWNTOWNS	RETIRE TENNESSEE
Bledsoe Co. Pikeville	Yes	Tennessee Downtowns	
Bradley Co. Charleston Cleveland	Yes	Main Street	
Grundy Co. Altamont Beersheba Springs Coalmont Gruetli-Laager Monteagle Palmer Tracy City			
Hamilton Co. Chattanooga Collegedale East Ridge Lakesite Lookout Mtn. Red Bank Ridgeside Signal Mtn. Soddy Daisy Walden	Yes		Yes
Marion Co. Jasper Kimball New Hope Orme Powell's Crossroads South Pittsburg Whitwell	Yes		
McMinn Co. Athens Calhoun Englewood Etowah Niota	Yes	Tennessee Downtowns	
Meigs Co. Decatur	Yes		
Polk Co. Benton Copperhill Ducktown	Yes		
Rhea Co. Dayton Graysville Spring City	Yes	Main Street	
Sequatchie Co. Dunlap	Yes		

**STATUS OF LONG RANGE PLANNING DOCUMENTS
JANUARY, 2011**

SOUTHEAST TENNESSEE REGION

COUNTY/ MUNICIPALITY	COMPREHENSIVE PLANNING DOCUMENT(S)	EFFECTIVE YEARS
Bledsoe Co. (1976) Pikeville (1976)		
Bradley Co. Charleston	Land Use Plan	1995 - 2010
Cleveland	Land Use Plan	2004 - 2014
Grundy Co. Altamont Beersheba Springs Coalmont Gruetli-Laager Monteagle (1988) Palmer Tracy City	Land Use Plan	1988 - 2010
Hamilton Co.	Comprehensive Plan *Includes Several Sectional Plans	2006 - 2030
Chattanooga Collegedale East Ridge	Downtown Plan	2004 - 2025
Lakesite Lookout Mtn. Red Bank Ridgeside	Land Use Plan	2007 - 2030
Signal Mtn. Soddy Daisy Walden	Land Use Plan Land Use Plan	2008 - 2030 2006 - 2030
Marion Co. (1969) Jasper Kimball New Hope Orme Powell's Crossroads South Pittsburg Whitwell	Land Use Plan	2004 - 2024
McMinn Co. (1970) Athens Calhoun Englewood (1968) Etowah (1968) Niota	Land Use Plan	2004 - 2024
Meigs Co. Decatur	Land Use Plan	1991 - 2011
Polk Co. Benton Copperhill Ducktown		

SOUTHEAST TENNESSEE REGION (CONT'D)


COUNTY/ MUNICIPALITY	COMPREHENSIVE PLANNING DOCUMENT(s)	EFFECTIVE YEARS
Rhea Co. (1973)		
Dayton (1988)		
Graysville (1980)		
Spring City (1991)	Land Use Plan	1991 - 2011
Sequatchie Co.		
Dunlap	Community Facilities Plan	2005 – 2025
LUP (1989)	Land Use Plan	1989 - 2010

*Projected Completion of new Plan

APPENDIX C – County Health Data

9/13/12

www.countyhealthrankings.org/print/county/snapshots/2012/13/047+083+295

 County Health Rankings & Roadmaps A Healthier Nation, County by County					
	Catoosa County	Error Margin	National Benchmark*	Georgia	Rank (of 156)
Health Outcomes					37
Mortality					11
Premature death	6,940	6,245-7,636	5,466	7,965	
Morbidity					95
Poor or fair health	22%	17-28%	10%	16%	
Poor physical health days	4.7	3.6-5.9	2.6	3.6	
Poor mental health days	4.8	3.2-6.4	2.3	3.4	
Low birthweight	8.8%	8.1-9.6%	6.0%	9.4%	
Health Factors					44
Health Behaviors					139
Adult smoking	29%	23-36%	14%	19%	
Adult obesity	33%	27-39%	25%	28%	
Physical inactivity	30%	24-36%	21%	24%	
Excessive drinking	12%	8-19%	8%	14%	
Motor vehicle crash death rate	16	12-20	12	17	
Sexually transmitted infections	123		84	411	
Teen birth rate	55	51-59	22	54	
Clinical Care					28
Uninsured	18%	17-20%	11%	21%	
Primary care physicians	1,505:1		631:1	1,024:1	
Preventable hospital stays	66	59-74	49	68	
Diabetic screening	87%	80-94%	89%	83%	
Mammography screening	65%	57-72%	74%	66%	
Social & Economic Factors					9
High school graduation	80%			81%	
Some college	61%	57-66%	68%	58%	
Unemployment	8.0%		5.4%	10.2%	
Children in poverty	21%	15-26%	13%	25%	
Inadequate social support	18%	13-24%	14%	21%	
Children in single-parent households	29%	24-35%	20%	36%	
Violent crime rate	173		73	470	
Physical Environment					113
Air pollution-particulate matter days	2		0	2	
Air pollution-ozone days	10		0	12	
Access to recreational facilities	9		16	8	
Limited access to healthy foods	18%		0%	10%	
Fast food restaurants	59%		25%	50%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012

www.countyhealthrankings.org/print/county/snapshots/2012/13/047+083+295



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Dade County	Error Margin	National Benchmark*	Georgia	Rank (of 156)
Health Outcomes					81
Mortality					74
Premature death	9,640	7,933-11,347	5,466	7,965	
Morbidity					109
Poor or fair health	17%	11-26%	10%	16%	
Poor physical health days	4.0	2.3-5.7	2.6	3.6	
Poor mental health days	5.6	3.1-8.0	2.3	3.4	
Low birthweight	10.3%	8.7-12.0%	6.0%	9.4%	
Health Factors					27
Health Behaviors					20
Adult smoking			14%	19%	
Adult obesity	28%	22-35%	25%	28%	
Physical inactivity	24%	18-31%	21%	24%	
Excessive drinking			8%	14%	
Motor vehicle crash death rate	21	13-30	12	17	
Sexually transmitted infections	93		84	411	
Teen birth rate	35	30-41	22	54	
Clinical Care					64
Uninsured	22%	20-24%	11%	21%	
Primary care physicians	1,344:1		631:1	1,024:1	
Preventable hospital stays	64	52-76	49	68	
Diabetic screening	85%	74-97%	89%	83%	
Mammography screening	56%	44-66%	74%	66%	
Social & Economic Factors					24
High school graduation	77%			81%	
Some college	51%	42-59%	68%	58%	
Unemployment	8.8%		5.4%	10.2%	
Children in poverty	22%	16-29%	13%	25%	
Inadequate social support			14%	21%	
Children in single-parent households	34%	22-46%	20%	36%	
Violent crime rate	244		73	470	
Physical Environment					69
Air pollution-particulate matter days	0		0	2	
Air pollution-ozone days	2		0	12	
Access to recreational facilities	6		16	8	
Limited access to healthy foods	28%		0%	10%	
Fast food restaurants	47%		25%	50%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Bledsoe County	Error Margin	National Benchmark *	Tennessee	Rank (of 95)
Health Outcomes					35
Mortality					16
Premature death	8,505	6,634-10,377	5,466	9,093	
Morbidity					78
Poor or fair health	26%	17-37%	10%	19%	
Poor physical health days	7.5	3.8-11.3	2.6	4.1	
Poor mental health days	4.4	2.1-6.7	2.3	3.4	
Low birthweight	7.8%	6.1-9.6%	6.0%	9.4%	
Health Factors					68
Health Behaviors					50
Adult smoking			14%	24%	
Adult obesity	33%	26-40%	25%	32%	
Physical inactivity	36%	28-44%	21%	30%	
Excessive drinking	6%	2-14%	8%	9%	
Motor vehicle crash death rate	31	20-43	12	22	
Sexually transmitted infections	129		84	478	
Teen birth rate	56	46-65	22	55	
Clinical Care					79
Uninsured	20%	18-23%	11%	16%	
Primary care physicians	3,279:1		631:1	837:1	
Preventable hospital stays	121	103-139	49	86	
Diabetic screening	82%	70-93%	89%	85%	
Mammography screening	67%	53-80%	74%	63%	
Social & Economic Factors					73
High school graduation	75%			79%	
Some college	26%	18-34%	68%	55%	
Unemployment	12.8%		5.4%	9.7%	
Children in poverty	34%	24-45%	13%	26%	
Inadequate social support	17%	10-29%	14%	19%	
Children in single-parent households	27%	17-37%	20%	35%	
Violent crime rate	161		73	713	
Physical Environment					22
Air pollution-particulate matter days	0		0	1	
Air pollution-ozone days	1		0	8	
Access to recreational facilities	0		16	8	
Limited access to healthy foods	2%		0%	11%	
Fast food restaurants	25%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Walker County	Error Margin	National Benchmark *	Georgia	Rank (of 156)
Health Outcomes					102
Mortality					93
Premature death	10,270	9,387-11,152	5,466	7,965	
Morbidity					124
Poor or fair health	23%	18-30%	10%	16%	
Poor physical health days	4.7	3.3-6.0	2.6	3.6	
Poor mental health days	4.0	2.7-5.3	2.3	3.4	
Low birthweight	10.6%	9.8-11.4%	6.0%	9.4%	
Health Factors					80
Health Behaviors					133
Adult smoking	27%	21-34%	14%	19%	
Adult obesity	31%	25-37%	25%	28%	
Physical inactivity	36%	30-43%	21%	24%	
Excessive drinking	8%	4-14%	8%	14%	
Motor vehicle crash death rate	26	21-31	12	17	
Sexually transmitted infections	142		84	411	
Teen birth rate	74	70-79	22	54	
Clinical Care					74
Uninsured	21%	19-23%	11%	21%	
Primary care physicians	2,495:1		631:1	1,024:1	
Preventable hospital stays	66	61-72	49	68	
Diabetic screening	81%	76-86%	89%	83%	
Mammography screening	63%	57-68%	74%	66%	
Social & Economic Factors					47
High school graduation	76%			81%	
Some college	46%	42-50%	68%	58%	
Unemployment	9.7%		5.4%	10.2%	
Children in poverty	26%	19-32%	13%	25%	
Inadequate social support	16%	12-21%	14%	21%	
Children in single-parent households	31%	26-37%	20%	36%	
Violent crime rate	520		73	470	
Physical Environment					116
Air pollution-particulate matter days	2		0	2	
Air pollution-ozone days	10		0	12	
Access to recreational facilities	8		16	8	
Limited access to healthy foods	23%		0%	10%	
Fast food restaurants	51%		25%	50%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Bradley County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					18
Mortality					14
Premature death	8,452	7,806-9,098	5,466	9,093	
Morbidity					35
Poor or fair health	19%	16-23%	10%	19%	
Poor physical health days	4.7	3.8-5.5	2.6	4.1	
Poor mental health days	4.4	3.5-5.3	2.3	3.4	
Low birthweight	8.2%	7.6-8.8%	6.0%	9.4%	
Health Factors					19
Health Behaviors					12
Adult smoking	24%	20-30%	14%	24%	
Adult obesity	29%	25-34%	25%	32%	
Physical inactivity	31%	27-35%	21%	30%	
Excessive drinking	7%	4-11%	8%	9%	
Motor vehicle crash death rate	19	15-22	12	22	
Sexually transmitted infections	335		84	478	
Teen birth rate	54	50-57	22	55	
Clinical Care					25
Uninsured	18%	16-19%	11%	16%	
Primary care physicians	1,255:1		631:1	837:1	
Preventable hospital stays	92	85-98	49	86	
Diabetic screening	89%	84-94%	89%	85%	
Mammography screening	63%	57-68%	74%	63%	
Social & Economic Factors					28
High school graduation	78%			79%	
Some college	55%	51-58%	68%	55%	
Unemployment	9.0%		5.4%	9.7%	
Children in poverty	25%	20-31%	13%	26%	
Inadequate social support	20%	16-25%	14%	19%	
Children in single-parent households	31%	26-36%	20%	35%	
Violent crime rate	766		73	713	
Physical Environment					62
Air pollution-particulate matter days	0		0	1	
Air pollution-ozone days	7		0	8	
Access to recreational facilities	9		16	8	
Limited access to healthy foods	19%		0%	11%	
Fast food restaurants	59%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Grundy County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					95
Mortality					93
Premature death	13,947	11,658-16,237	5,466	9,093	
Morbidity					92
Poor or fair health			10%	19%	
Poor physical health days	6.5	4.4-8.6	2.6	4.1	
Poor mental health days	7.1	4.4-9.8	2.3	3.4	
Low birthweight	10.0%	8.3-11.6%	6.0%	9.4%	
Health Factors					89
Health Behaviors					35
Adult smoking			14%	24%	
Adult obesity	30%	24-38%	25%	32%	
Physical inactivity	33%	25-41%	21%	30%	
Excessive drinking	5%	2-13%	8%	9%	
Motor vehicle crash death rate	58	43-72	12	22	
Sexually transmitted infections	99		84	478	
Teen birth rate	62	53-71	22	55	
Clinical Care					92
Uninsured	19%	17-21%	11%	16%	
Primary care physicians	7,122:1		631:1	837:1	
Preventable hospital stays	152	131-173	49	86	
Diabetic screening	81%	69-92%	89%	85%	
Mammography screening	41%	30-52%	74%	63%	
Social & Economic Factors					88
High school graduation	86%			79%	
Some college	24%	19-29%	68%	55%	
Unemployment	12.1%		5.4%	9.7%	
Children in poverty	43%	31-54%	13%	26%	
Inadequate social support			14%	19%	
Children in single-parent households	39%	30-47%	20%	35%	
Violent crime rate	604		73	713	
Physical Environment					31
Air pollution-particulate matter days	0		0	1	
Air pollution-ozone days	1		0	8	
Access to recreational facilities	7		16	8	
Limited access to healthy foods	1%		0%	11%	
Fast food restaurants	56%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation. County by County

	Hamilton County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					29
Mortality					18
Premature death	8,597	8,226-8,967	5,466	9,093	
Morbidity					59
Poor or fair health	17%	15-19%	10%	19%	
Poor physical health days	3.4	3.0-3.8	2.6	4.1	
Poor mental health days	3.0	2.6-3.4	2.3	3.4	
Low birthweight	11.2%	10.9-11.6%	6.0%	9.4%	
Health Factors					7
Health Behaviors					4
Adult smoking	18%	16-20%	14%	24%	
Adult obesity	30%	28-33%	25%	32%	
Physical inactivity	27%	25-30%	21%	30%	
Excessive drinking	9%	8-11%	8%	9%	
Motor vehicle crash death rate	14	13-16	12	22	
Sexually transmitted infections	556		84	478	
Teen birth rate	52	51-54	22	55	
Clinical Care					6
Uninsured	15%	14-16%	11%	16%	
Primary care physicians	616:1		631:1	837:1	
Preventable hospital stays	48	46-51	49	86	
Diabetic screening	86%	83-88%	89%	85%	
Mammography screening	69%	66-73%	74%	63%	
Social & Economic Factors					23
High school graduation	72%			79%	
Some college	62%	60-64%	68%	55%	
Unemployment	8.4%		5.4%	9.7%	
Children in poverty	25%	20-29%	13%	26%	
Inadequate social support	16%	14-18%	14%	19%	
Children in single-parent households	35%	33-38%	20%	35%	
Violent crime rate	775		73	713	
Physical Environment					93
Air pollution-particulate matter days	3		0	1	
Air pollution-ozone days	14		0	8	
Access to recreational facilities	11		16	8	
Limited access to healthy foods	14%		0%	11%	
Fast food restaurants	53%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	McMinn County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					55
Mortality					50
Premature death	9,752	8,820-10,684	5,466	9,093	
Morbidity					66
Poor or fair health	23%	17-30%	10%	19%	
Poor physical health days	4.9	3.6-6.2	2.6	4.1	
Poor mental health days	4.2	2.8-5.5	2.3	3.4	
Low birthweight	9.3%	8.4-10.2%	6.0%	9.4%	
Health Factors					44
Health Behaviors					21
Adult smoking	21%	16-26%	14%	24%	
Adult obesity	34%	28-39%	25%	32%	
Physical inactivity	34%	28-40%	21%	30%	
Excessive drinking	5%	3-10%	8%	9%	
Motor vehicle crash death rate	26	21-31	12	22	
Sexually transmitted infections	303		84	478	
Teen birth rate	58	53-62	22	55	
Clinical Care					24
Uninsured	17%	16-19%	11%	16%	
Primary care physicians	1,223:1		631:1	837:1	
Preventable hospital stays	90	83-98	49	86	
Diabetic screening	85%	79-91%	89%	85%	
Mammography screening	67%	60-74%	74%	63%	
Social & Economic Factors					72
High school graduation	72%			79%	
Some college	41%	36-45%	68%	55%	
Unemployment	12.4%		5.4%	9.7%	
Children in poverty	28%	21-35%	13%	26%	
Inadequate social support	20%	14-27%	14%	19%	
Children in single-parent households	32%	26-37%	20%	35%	
Violent crime rate	701		73	713	
Physical Environment					78
Air pollution-particulate matter days	2		0	1	
Air pollution-ozone days	1		0	8	
Access to recreational facilities	2		16	8	
Limited access to healthy foods	0%		0%	11%	
Fast food restaurants	59%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Marion County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					88
Mortality					68
Premature death	10,817	9,455-12,179	5,466	9,093	
Morbidity					94
Poor or fair health	29%	22-37%	10%	19%	
Poor physical health days	6.3	4.4-8.3	2.6	4.1	
Poor mental health days	2.9	2.0-3.8	2.3	3.4	
Low birthweight	12.0%	10.7-13.3%	6.0%	9.4%	
Health Factors					43
Health Behaviors					37
Adult smoking	23%	17-31%	14%	24%	
Adult obesity	32%	26-38%	25%	32%	
Physical inactivity	37%	30-44%	21%	30%	
Excessive drinking	8%	4-16%	8%	9%	
Motor vehicle crash death rate	27	20-34	12	22	
Sexually transmitted infections	244		84	478	
Teen birth rate	64	58-70	22	55	
Clinical Care					53
Uninsured	17%	16-19%	11%	16%	
Primary care physicians	1,404:1		631:1	837:1	
Preventable hospital stays	104	93-116	49	86	
Diabetic screening	86%	77-94%	89%	85%	
Mammography screening	52%	43-60%	74%	63%	
Social & Economic Factors					56
High school graduation	74%			79%	
Some college	39%	33-45%	68%	55%	
Unemployment	10.5%		5.4%	9.7%	
Children in poverty	33%	25-41%	13%	26%	
Inadequate social support	20%	13-29%	14%	19%	
Children in single-parent households	32%	25-40%	20%	35%	
Violent crime rate	358		73	713	
Physical Environment					55
Air pollution-particulate matter days	0		0	1	
Air pollution-ozone days	2		0	8	
Access to recreational facilities	7		16	8	
Limited access to healthy foods	29%		0%	11%	
Fast food restaurants	41%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Rhea County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					86
Mortality					88
Premature death	11,870	10,481-13,258	5,466	9,093	
Morbidity					81
Poor or fair health	23%	17-31%	10%	19%	
Poor physical health days	5.3	3.6-6.9	2.6	4.1	
Poor mental health days	4.2	2.7-5.7	2.3	3.4	
Low birthweight	9.9%	8.8-11.0%	6.0%	9.4%	
Health Factors					56
Health Behaviors					45
Adult smoking	21%	14-30%	14%	24%	
Adult obesity	34%	28-40%	25%	32%	
Physical inactivity	32%	25-39%	21%	30%	
Excessive drinking	10%	5-22%	8%	9%	
Motor vehicle crash death rate	27	20-34	12	22	
Sexually transmitted infections	302		84	478	
Teen birth rate	72	66-78	22	55	
Clinical Care					55
Uninsured	18%	16-20%	11%	16%	
Primary care physicians	2,071:1		631:1	837:1	
Preventable hospital stays	97	87-107	49	86	
Diabetic screening	83%	76-90%	89%	85%	
Mammography screening	62%	54-69%	74%	63%	
Social & Economic Factors					77
High school graduation	77%			79%	
Some college	37%	31-42%	68%	55%	
Unemployment	12.6%		5.4%	9.7%	
Children in poverty	32%	24-41%	13%	26%	
Inadequate social support	25%	18-33%	14%	19%	
Children in single-parent households	33%	24-41%	20%	35%	
Violent crime rate	329		73	713	
Physical Environment					40
Air pollution-particulate matter days	0		0	1	
Air pollution-ozone days	1		0	8	
Access to recreational facilities	6		16	8	
Limited access to healthy foods	0%		0%	11%	
Fast food restaurants	60%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Polk County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					77
Mortality					69
Premature death	11,000	9,033-12,967	5,466	9,093	
Morbidity					80
Poor or fair health	20%	13-29%	10%	19%	
Poor physical health days	5.7	3.5-7.9	2.6	4.1	
Poor mental health days	4.5	2.6-6.3	2.3	3.4	
Low birthweight	9.9%	8.3-11.5%	6.0%	9.4%	
Health Factors					59
Health Behaviors					70
Adult smoking			14%	24%	
Adult obesity	33%	26-40%	25%	32%	
Physical inactivity	35%	28-42%	21%	30%	
Excessive drinking	9%	4-19%	8%	9%	
Motor vehicle crash death rate	40	29-52	12	22	
Sexually transmitted infections	191		84	478	
Teen birth rate	75	65-85	22	55	
Clinical Care					47
Uninsured	19%	17-21%	11%	16%	
Primary care physicians	928:1		631:1	837:1	
Preventable hospital stays	131	116-147	49	86	
Diabetic screening	87%	78-96%	89%	85%	
Mammography screening	65%	54-75%	74%	63%	
Social & Economic Factors					44
High school graduation	80%			79%	
Some college	32%	24-39%	68%	55%	
Unemployment	11.6%		5.4%	9.7%	
Children in poverty	31%	22-39%	13%	26%	
Inadequate social support	17%	10-27%	14%	19%	
Children in single-parent households	30%	19-40%	20%	35%	
Violent crime rate	289		73	713	
Physical Environment					82
Air pollution-particulate matter days	0		0	1	
Air pollution-ozone days	1		0	8	
Access to recreational facilities	0		16	8	
Limited access to healthy foods	34%		0%	11%	
Fast food restaurants	54%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Sequatchie County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					89
Mortality					75
Premature death	11,234	9,031-13,438	5,466	9,093	
Morbidity					93
Poor or fair health	30%	21-40%	10%	19%	
Poor physical health days	7.5	5.2-9.8	2.6	4.1	
Poor mental health days	3.7	1.8-5.6	2.3	3.4	
Low birthweight	10.5%	8.8-12.3%	6.0%	9.4%	
Health Factors					76
Health Behaviors					86
Adult smoking			14%	24%	
Adult obesity	36%	28-44%	25%	32%	
Physical inactivity	32%	24-40%	21%	30%	
Excessive drinking	12%	6-23%	8%	9%	
Motor vehicle crash death rate	42	28-55	12	22	
Sexually transmitted infections	111		84	478	
Teen birth rate	75	64-85	22	55	
Clinical Care					54
Uninsured	19%	16-21%	11%	16%	
Primary care physicians	1,953:1		631:1	837:1	
Preventable hospital stays	81	65-97	49	86	
Diabetic screening	83%	71-96%	89%	85%	
Mammography screening	59%	46-71%	74%	63%	
Social & Economic Factors					63
High school graduation	80%			79%	
Some college	31%	19-43%	68%	55%	
Unemployment	10.5%		5.4%	9.7%	
Children in poverty	34%	25-43%	13%	26%	
Inadequate social support			14%	19%	
Children in single-parent households	34%	22-47%	20%	35%	
Violent crime rate	425		73	713	
Physical Environment					52
Air pollution-particulate matter days	0		0	1	
Air pollution-ozone days	9		0	8	
Access to recreational facilities	14		16	8	
Limited access to healthy foods	24%		0%	11%	
Fast food restaurants	43%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012



County Health Rankings & Roadmaps

A Healthier Nation, County by County

	Rhea County	Error Margin	National Benchmark*	Tennessee	Rank (of 95)
Health Outcomes					86
Mortality					88
Premature death	11,870	10,481-13,258	5,466	9,093	
Morbidity					81
Poor or fair health	23%	17-31%	10%	19%	
Poor physical health days	5.3	3.6-6.9	2.6	4.1	
Poor mental health days	4.2	2.7-5.7	2.3	3.4	
Low birthweight	9.9%	8.8-11.0%	6.0%	9.4%	
Health Factors					56
Health Behaviors					45
Adult smoking	21%	14-30%	14%	24%	
Adult obesity	34%	28-40%	25%	32%	
Physical inactivity	32%	25-39%	21%	30%	
Excessive drinking	10%	5-22%	8%	9%	
Motor vehicle crash death rate	27	20-34	12	22	
Sexually transmitted infections	302		84	478	
Teen birth rate	72	66-78	22	55	
Clinical Care					55
Uninsured	18%	16-20%	11%	16%	
Primary care physicians	2,071:1		631:1	837:1	
Preventable hospital stays	97	87-107	49	86	
Diabetic screening	83%	76-90%	89%	85%	
Mammography screening	62%	54-69%	74%	63%	
Social & Economic Factors					77
High school graduation	77%			79%	
Some college	37%	31-42%	68%	55%	
Unemployment	12.6%		5.4%	9.7%	
Children in poverty	32%	24-41%	13%	26%	
Inadequate social support	25%	18-33%	14%	19%	
Children in single-parent households	33%	24-41%	20%	35%	
Violent crime rate	329		73	713	
Physical Environment					40
Air pollution-particulate matter days	0		0	1	
Air pollution-ozone days	1		0	8	
Access to recreational facilities	6		16	8	
Limited access to healthy foods	0%		0%	11%	
Fast food restaurants	60%		25%	52%	

* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

2012

NOTES & REFERENCES

¹ The Bureau of Labor Statistics publishes the U-6 unemployment rate alongside the official U-3 figures. U-6 calculations include the “[t]otal unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force.” For July 2012, the U-3 unemployment rate for the nation was 8.3 percent; the U-6 totaled 15.0 percent. Because the federal government recognizes U-3 as the *official* unemployment rate, only the U-3 figures are considered in this CEDS.

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³ Yen, 2012.

⁴ Yen, 2012.

⁵ Yen, 2012.

⁶ United States Department of Agriculture, “Supplemental Nutrition Assistance Program Participation and Costs,” July 26, 2012, <http://www.fns.usda.gov/pd/SNAPsummary.htm>

⁷ NAICS raw data files accessible through Bureau of Labor Statistics FTP site: <ftp://ftp.bls.gov/pub/special.requests/cew/>

⁸ Employment figures for TVA and EBP obtained from Hoover’s, Inc. online business database (subscription required): <http://www.hoovers.com/about/100000489-1.html>

⁹ Tax Foundation, “The Facts on Tennessee’s Tax Climate,” 2012, <http://taxfoundation.org/state-tax-climate/tennessee>

¹⁰ Hamilton County STEM High School Chattanooga, “Southeast TN Stem Overview,” http://www.stemhighschoolchattanooga.com/uploads/1/2/6/8/12686345/se_tn_stem_overview.pdf

¹¹ Hamilton County STEM High School, <http://www.stemhighschoolchattanooga.com/>

¹² “VW Academy adds MBA site,” *Chattanooga Times-Free Press*, March 30, 2012.

¹³ Tri-State Regional Workforce Alliance, “Educational Infrastructure,” *2010 Sector-Based Analysis and Report*, <http://www.nsparc.msstate.edu/sites/Tri-State-Website/index.php?page=eduinfrastructure>

¹⁴ Tri-State Regional Workforce Alliance, “Mission,” 2010, <http://www.nsparc.msstate.edu/sites/Tri-State-Website/>

¹⁵ Kathy Lohr, "Georgia Town Ranks as City with Worst U.S. Job Loss," *NPR.org*, August 10, 2012, <http://www.npr.org/2012/08/10/158556689/georgia-town-ranks-as-city-with-worst-u-s-job-loss>

¹⁶ The 2012 Local Workforce Investment Area Five (LWIA~5) 5-Year Strategic Plan is available online at <http://www.secareercenter.org/downloads/LWIA5StrategicPlan2012.pdf>

¹⁷ U.S. Army Corps of Engineers, "Port Facility Spreadsheet," *Navigation Data Center: Ports and Waterways Facilities*, August 8, 2012, <http://www.ndc.iwr.usace.army.mil/ports/ports.aspn>

¹⁸ Tennessee Valley Authority, "Navigation on the Tennessee River," <http://www.tva.com/river/navigation/index.htm>

¹⁹ Tennessee Valley Authority, "Navigation on the Tennessee River."

²⁰ Tennessee Department of Transportation, *Transportation Planning Report: Corridor K*, prepared by URS Corporation (2010), available online at <http://www.tdot.state.tn.us/corridork/docs/CorridorK-TPR.pdf>

²¹ Tennessee Advisory Commission on Intergovernmental Relations (TACIR), "Transportation Projects by County," from Appendix D, Table D-2a, in *Building Tennessee's Tomorrow*, June 2011, <http://www.tn.gov/tacir/Infrastructure/infra2011.shtml>

²² "America's Top 50 Bike-Friendly Cities," *Bicycling Magazine*, 2012, <http://www.bicycling.com/ride-maps/featured-rides/27-chattanooga-tn-0>

²³ Jim Wood, Tara McCue, and Elizabeth Rothbeind, "The Economic Impact of Trails on Communities," webinar recorded April 8, 2011, available on AmericanTrails.org's *National Trails Training Partnership* website, <http://www.americantrails.org/resources/economics/index.html>

²⁴ Wood, McCue, and Rothbeind, 2011.

²⁵ Wood, McCue, and Rothbeind, 2011.

²⁶ Wood, McCue, and Rothbeind, 2011.

²⁷ The Wood, McCue, and Rothbeind webinar explains that successful regional greenway projects have been most effective where statewide plans are in place.

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